

1973

The development of a counselor selection scale through an item analysis of the California psychological inventory

Willard LeGrande Lewis III

College of William & Mary - School of Education

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THROUGH AN ITEM ANALYSIS OF THE CALIFORNIA
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THE DEVELOPMENT OF A COUNSELOR SELECTION
SCALE THROUGH AN ITEM ANALYSIS OF THE
CALIFORNIA PSYCHOLOGICAL INVENTORY

A Dissertation
Presented to the
Faculty of the School of Education
College of William and Mary in Virginia

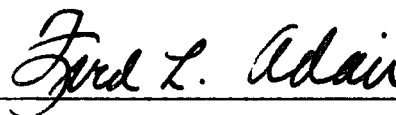
In Partial Fulfillment
of the Requirements for the Degree
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by
Willard L. Lewis
June, 1973

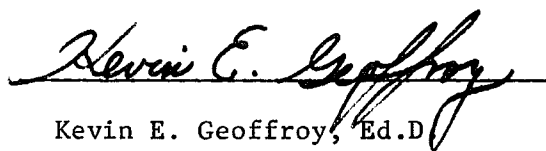
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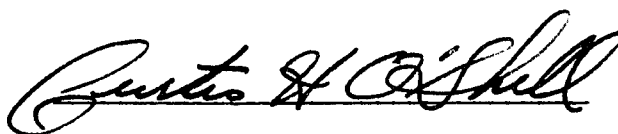
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THE DEVELOPMENT OF A COUNSELOR SELECTION
SCALE THROUGH AN ITEM ANALYSIS OF THE
CALIFORNIA PSYCHOLOGICAL INVENTORY

Chapter 1

Introduction

If man were to speculate about that point in time at which he was first chosen to fulfill a task on the basis of his inherited or acquired skills, he would undoubtedly retreat through evolutionary history to the point at which the first departure from self-sufficiency and the first step toward cooperative living were taken. From this point in time to the present, the process of "finding the right man" to perform a given function has become both common and sophisticated.

An obvious manifestation of the desire to match men and jobs is the growth of testing and its application to personnel selection. The birth of this movement is difficult to ascertain but can be traced to Chinese Civil Service examinations as early as 1115 B.C. (Dubois, 1966).

Fiske (1971) reports that:

In the biblical story of Gideon, warriors were selected for a special mission by two screenings. The first considered their motivation; those who did not wish to participate were allowed to withdraw. The second involved observations of the way they drank from a body of water; those who put their heads down to the water were eliminated and those who brought water up to their mouths in their hands were chosen. The presumed rationale was that the latter were more alert and watchful [p. 4].

Although the testing movement may be rooted in antiquity, the most significant period of development has been the past 70 years.

An influential source of test development at the turn of the century was J. M. Cattell.

Although his interests were mainly in the area of psychophysics, perception and reaction time, Cattell nevertheless had a strong influence upon the development through his support for the practical utilization of psychological knowledge [Boring, 1950, pp. 537-540].

An additional influence was the work of A. Binet whose investigations led to the development of the now famous Binet tests of intelligence.

Eventually, those interested in psychological differences on nonintellective traits adopted the methodology of their colleagues. In 1917, R. S. Woodworth developed the "Woodworth Personal Data Sheet" (WPDS) which was a byproduct of the need for psychological assessment of World War I soldiers (Anastasi, 1968). This test, the first attempt at personality assessment via the self-report mode, gave great impetus to the personality assessment movement.

The next major step in the progression of personality assessment occurred in the late 1920s and early 1930s when instruments developed through the empirical criterion technique were introduced (Cronbach, 1960, p. 468). One of the earliest examples of instruments developed through the empirical approach was the "Strong Vocational Interest Blank" (SVIB). First published in 1927, the SVIB scales were scored on those items which statistically discriminated between members of a given profession and people in general. The rationale, now supported empirically, is that if a subject's interests resemble those of people in a given occupation,

it is more likely that he will enjoy the work of that vocation.

A modification of this technique has since been used to develop scales for numerous vocations. This technique utilizes the process of nominating two criterion groups who are supposed to represent dichotomous positions on a given variable. In this way items are selected for scale retention on the basis of their ability to discriminate between the two groups, not on content alone. Since the advent of this technique, scales have been developed and used successfully as an objective measure of potential performance in fields as diverse as aviation, sales ability, and unskilled labor (Goldsmith, 1922; Guilford, 1947; Scott & Johnson, 1967).

Currently, the need for the selection of quality candidates for training, and eventually, employment, is paramount (American Personnel and Guidance Association [APGA], 1963; Association for Counselor Education and Supervision [ACES], 1963; National Vocational Guidance Association [NVGA], 1949). It is the purpose of this study to employ the empirical criterion group technique in an attempt to develop a Counselor Selection Scale (CSS) for use as an objective measure of counseling potential in prospective counseling trainees. Development of the scale will be facilitated through an item analysis of the "California Psychological Inventory" (CPI) (Gough, 1957).

Theoretical Background

The major impetus for this study is derived from an understanding of the empirical approach to test or scale development as presented by a number of current figures in statistics and personality

assessment (Fiske, 1971; Kerlinger, 1964; Lanyon & Goodstein, 1971). A principle of empirical scale construction is that any trait which can be identified and said to exist in a criterion group can be developed into a scale by comparing criterion group responses to the responses of the general population.

For the development of most empirical scales, the group difference method is the most thoroughly tried, tested and refined (Fiske, 1971). This approach initially involves the identification of clear-cut criterion groups. Hopefully, these groups represent opposite extremes of the construct to be examined. Once the criterion groups are established, people in each group are administered a large body of items and asked for their responses to each. An item analysis is then conducted on each of the items. Those items that significantly differentiate between the groups are returned for use on the scale.

In a clinical assessment of the empirical approach, Lanyon and Goodstein (1971) discuss two hypothetical tests: the "ABC" test for sales success and the "XYZ" test which predicts rehabilitation success following release from a hospital. In doing so, a number of important concepts are touched upon.

In the empirical approach to clinical assessment, the psychologist would need only to administer either of these tests, compare the obtained results with the empirical research findings, and make his prediction as to the probability of success or failure of the individual in either door-to-door selling or post-hospital rehabilitation. The psychologist usually neither

knows, nor is he concerned about, the psychological or theoretical connection between the individual's test responses and the behavior to be predicted. In the empirical approach it is not necessary to understand why there is a connection between high scores on the ABC test and selling behavior; it is sufficient to know that such a relationship reliably exists [pp. 20-21].

The central issue that is illustrated is that it is not a question of why there is a connection between the item and the criterion; the existence of the relationship is in itself sufficient for use as a discriminator. As Meehl (1945) wrote:

[T]he verbal type of personality inventory is not most fruitfully seen as a "self-rating" or self-description whose value requires the assumption of accuracy on the part of the testee in his observations of self. Rather is the response to a test item taken as an intrinsically interesting segment of verbal behavior, knowledge regarding which may be of more value than any knowledge of the "factual" material about which the item superficially purports to inquire. Thus if a hypochondriac says that he has "many headaches" the fact of interest is that he says this [p. 9].

In making the same point, Cattell (1946) cites the following illustration:

The questionnaire asks, "Would you enjoy being a sailor in a submarine?" If the subject replies "Yes," one does not assume that he would in fact be happy as a sailor in a submarine. One observes, perhaps, that good librarians as opposed to bad

librarians more frequently answer "No" to this question, and one uses it empirically as an index of librarianship interests or temperament [p. 344].

This being the case, precedent is established for the empirical development of a scale or scales that will be applicable to the general population.

Statement of the Problem

A review of the literature surrounding counselor and counselor candidate selection demonstrates that for the past 25 years the realization that "personal or non-intellective qualities are basis to effective functioning in the counseling relationship" has been apparent (Johnson, Shertzer, Linden, & Stone, 1967, p. 297). Nearly 10 years ago a report from the American Personnel and Guidance Association (APGA) Committee on Professional Preparation and Standards urged that "Criteria [for selection] should include personal qualifications for counseling, as well as the ability necessary to master academic requirements and acquire professional skills [APGA, 1963, p. 484]." In the following year, the Association for Counselor Education and Supervision (ACES) listed the potential for developing client relationships among its criteria for selection for training (ACES, 1963).

Despite an obvious and recognized need for an objective means of assessment of the combination of personality traits that lead to effective counseling, no scale has been developed for that purpose. It is felt that identifiable qualities for establishing criterion groups are now available (Patterson, 1967, p. 89). In identifying

groups of "most" and "least" effective counselors the foundation for the empirical development of a scale to assist in the counselor selection process is laid. The study is intended to:

- a. Determine those items of the CPI which successfully discriminate between "most effective" and "least effective" groups of counselors.
- b. Assimilate these items onto a scale to measure potential success as a counselor.
- c. Determine whether or not the CSS can successfully discriminate between those who are "most effective" and "least effective" in the counseling process.

Hypothesis

For the purpose of statistical research, the following null hypothesis is stated: There will be no significant differences between counselor education students who are nominated as "most effective" and those who are nominated as "least effective" counselors as measured by the empirically developed Counselor Selection Scale.

Description of the Instrument

The verbal stimuli which constitute the body of items to be subjected to analysis are all contained in the California Psychological Inventory. The CPI was developed by Gough (1957) in the early 1950s. The theoretical construction of this instrument of personality assessment intended that the 480 statements of the CPI would yield 18 separate scale scores for application to normal adult and adolescent subjects. Subject responses of either true or false are keyed for the various scales, each of which is representative of a facet of personality.

Gough (1957) has divided the 18 separate scales that were developed for the CPI into four categories on the basis of "the psychological and psychometric clusterings which exist among them [p. 3]." Class I scales are considered to be measures of poise, ascendancy, and self-assurance. Scales included in this group are the Dominance (Do), Capacity for status (Cs), Sociability (Sy), Social presence (Sp), Self-acceptance (Sa), and Sense of well-being (Wb) scales. Class II measures include the Responsibility (Re), Socialization (So), Self-control (Sc), Tolerance (To), Good impression (Gi), and Communality (Cm) scales and are indicators of socialization, maturity, and responsibility. Class III scales are utilized in measuring achievement potential and intellectual efficiency. The Achievement via conformance (Ac), Achievement via independence (Ai), and Intellectual efficiency (Ie) scales are included in this group while the Class IV scales of Psychological-mindedness (Py), Flexibility (Fx), and Femininity (Fe) are assessors of intellectual and interest modes (see Appendix A).

A majority of the CPI scales (12) were developed by the "empirical technique" which has been followed frequently in personality assessment instruments and is described in an earlier passage. Again, this method involves the identification of criterion groups, ideally at opposite ends of a trait related continuum, and identifying those items which differentiate between the two groups.

In an attempt to check the validation of the self-report inventory, three scales (Wb, Gi, and Cm) were developed with dual purposes. These scales represent identifiable traits of personality

but extreme scores in either direction on these scales may indicate a low validity for the particular administration. Descriptions for the CPI scales may be found in Appendix A.

Definition of Terms

To ensure consistency of interpretation, the following terms have been defined:

Most effective counselors. Those counselors ranked in the upper 25% of their group by the judges.

Least effective counselors. Those counselors ranked in the lowest 25% of their group by the judges.

Scale.

A Scale is a set of symbols or numerals so constructed that the symbols or numerals can be assigned by rule to the individuals (or their behaviors) to whom the scale is applied, the assignment being indicated by the individual's possession of whatever the scale is supposed to measure [Kerlinger, 1964, p. 480].

Trait. "A trait is an enduring characteristic of the individual to respond in a certain manner in all situations [Kerlinger, 1964, p. 483]."

Limitations of the Investigation

Because of the precarious nature of personality assessment and some internal shortcomings of the empirical technique of scale construction, the following limitations have been acknowledged:

a. There are no known universally acceptable definitions of effective or ineffective counseling. This factor may affect the

nomination to criterion groups.

b. The operational definitions of "most effective" and "least effective" may not be interpreted identically by raters. This too may affect nomination to criterion groups.

Plan of Presentation

The presentation of the investigation has been organized into five sequential parts which have been designated as chapters. The present chapter has served to identify the problem and establish the theoretical background for empirical scale development. Additionally, it was intended to discuss the instrument used for research, the definition of terms and the limitations of the study.

Chapter 2 presents a review of relevant research. A majority of this research is within the period of the past 25 years. Chapter 3 details the research methodology employed. Chapter 4 provides for examination of the collected data and an analysis of the data in terms appropriate for the study. Chapter 5 contains a summary of the study and contains the conclusions and recommendations drawn from the research.

Chapter 2

Review of the Literature

This chapter contains a review of the literature pertaining to the personality of the counselor. In the interest of clarity and convenience, the chapter is divided into the following sections:

- a. the need for personality assessment in counselor selection,
- b. speculated characteristics considered essential in an effective counselor (Shertzer & Stone, 1968),
- c. counselor descriptions via personality instruments,
- d. comparisons of effective and ineffective counselor groups,
- e. hypothesized characteristics of effective counselors, and
- f. a summary.

The Need for Personality

Assessment in Counselor

Selection

The importance of the counselor's characteristics to counseling outcome has long been recognized. Attention from professional organizations has been given to the issue since 1949 (NVGA, 1949). More recently, a report from the APGA Committee on Professional Preparation and Standards urged that "Criteria [for selection] should include personal qualifications for counseling, as well as the ability necessary to master academic requirements and acquire

professional skills [APGA, 1963, p. 484]." In the following year, the Association for Counselor Education and Supervision suggested that candidates and/or counselors should possess six basic qualities:

belief in each individual,
 commitment to individual human values,
 alertness to the world,
 openmindedness,
 self-understanding, and
 professional commitment (ACES, 1964, pp. 536-541).

Statements from professional groups such as the APGA and ACES are encouraged, in part, by research negating the value of the most traditional selection criteria, academic ability (Joslin, 1965; O'Hern & Arbuckle, 1964; Stoughton, 1957). It should be realized that:

the problem of selection of counselors is not the selection of technicians, of individuals who can learn the procedures involved in the conditioning process, but of individuals who can offer a therapeutic relationship [Patterson, 1967, p. 86].

In lieu of this awareness, it is somewhat surprising that "the research on the selection of counseling students is surprisingly sparse [Patterson, 1967, p. 76]." In a survey of five years of the Personnel and Guidance Journal, it is interesting to note that Barry and Wolf (1958) found only 14 of 411 articles that dealt directly with the problem of counselor selection.

Hill (1961) in a review of the literature pertaining to counselor selection suggests that a course of selection activities

similar to those used in other occupations be utilized. In short, he suggests that we

- a. identify pertinent job characteristics,
- b. identify those who should do well,
- c. use ongoing screening throughout training,
- d. train counselors in accordance with the realistic demands of the occupation,
- e. place the individual in the job best suited for him, and
- f. engage in follow-up studies to determine success.

Although these steps are well delineated, the major problem still exists. It is exceedingly difficult to identify those who should do well in that the development of a standardized personality pattern is made virtually impossible by the multivarious subroles a counselor must play (Hill & Green, 1961).

Perhaps it is the inability of those in the profession to reach a universally satisfactory description that is a detriment to the use of nonintellective variables in counselor selection. Whatever the reason, these variables (whose importance is well recognized) are rarely used. In a nationwide survey, Keppers (1961) found that in 182 degree granting programs 17% had absolutely no plan for admissions. Another 45% had no plans for applicant screening beyond regular graduate admission procedures. The greatest single criterion for admissions was undergraduate performance (76%) followed by "Graduate Record Examination" (GRE) scores 46%. Of the 182 schools surveyed, only 12% used any form of personality assessment.

A survey of requirements for admission to rehabilitation

counseling programs yielded somewhat similar results (Patterson, 1962). It was found that academic performance was the sole universal requirement for selections. Academic performance was most often supplemented by recommendations and interventions while results from the SVIB, "Guilford-Zimmerman Temperament Survey" (GZTS) or "Minnesota Multiphasic Personality Inventory" (MMPI) were used with the least frequency. In a review of similar studies of admissions, Patterson noted that all were rather inconsistent in policy after grade point average and GRE scores were considered.

The intent of this section has been twofold: first, to establish that the need of personality assessment in counselor selection has long been recognized; and second, that in spite of a recognized need, personality assessment is rarely used as a portion of the selection process.

Speculated Characteristics

Considered Essential in

Effective Counseling

The utilization of speculation to identify the personal qualities essential to effective counseling is the earliest and most primitive approach to counselor selection via personality assessment. Among the early speculators is the National Vocational Guidance Association (NVGA). In 1949, the NVGA issued a statement indicating that the ideal counselor was one who exhibited an interest in people, was patient, sensitive to others, emotionally stable, objective and trusted by others (NVGA, 1949). In a later publication, however, Wrenn (1952) makes the point that those who enter the

profession do so on a self-selecting basis. He maintains that considerably more information is needed in screening than a self-professed need to "do good" or "liking people." Thus, while terms such as those noted may be descriptive, they may be insufficient for selection criteria as well as being difficult to assess.

In spite of the selection difficulties inherent in the speculation approach to counselor, personality assessment pattern begins to appear. In a study reported by Hamrin and Paulson (1950), 91 counselors were requested to list those traits which they felt best facilitated counseling progress. A frequency tabulation was made and a rank order listing was made. These traits, in order of frequency, are (a) understanding, (b) sympathetic attitude, (c) friendliness, (d) sense of humor, (e) stability, (f) patience, (g) objectivity, (h) sincerity, (i) tact, (j) fairness, (k) tolerance, (l) neatness, (m) calmness, (n) broad-mindedness, (o) kindness, (p) pleasantness, (q) social intelligence, and (r) poise. Though couched in different terms, the similarity between the NVGA description and that of the 91 counselors in this study is readily apparent.

The emerging profile of the counselor is further substantiated by McQuary's (1964) work. The purpose of the McQuary study was "not to examine counselors, not to survey counselor educators, but to ask persons what counselor characteristics they would prefer if they were counselees [p. 145]." This was facilitated by encouraging 116 graduate students to write a free and anonymous response to the question, "If you found it necessary to seek out the services of a

counselor, what personal characteristics would you want this person to possess [p. 146]?" Responses were analyzed and tabulated to achieve rank order. The results are as follows:

- a. understanding,
- b. adequate professional training,
- c. "one who keeps confidence,"
- d. "one who is interested in me as a person," and
- e. friendly.

These traits are the top five of a list of more than 30 responses and demonstrates additional consistency in speculated counselor characteristics. Final support for the emerging report can be found in Shertzer and Stone (1966) who note that:

Ordinarily, descriptions of counselors include expressions such as friendliness, understanding, respect for a belief in the worth of the individual, attitudes of acceptance, permissiveness, empathy, sense of humor, common sense, objectivity, and freedom from prejudice [p. 105].

While pointing out this consistency, the authors also indicate that the measurement of many of these qualities is made difficult by semantic obstacles and the vagueness of concepts indicating that descriptions of this sort, by themselves, offer little refinement to selection proceedings. Cottle (1953) points out that although these lists are beneficial to the conceptualization of the counselor personality, they are unsatisfactory because they represent merely the opinions of those polled; they fail to distinguish between the counselor and other personnel; the traits of successful counselors

vary so widely that it is difficult to select one list as being satisfactory; and, finally, it is the interrelations or pattern of characteristics that is ultimately important.

Counselor Descriptions via

Personality Instruments

The next sequential step toward sophistication in personality assessment and description of counselors is the use of standardized personality inventories. Although standardized personality instruments have been used in many ways, the research reviewed in this section deals solely with counselor description.

Early research of this type is typified in Wrenn's (1952) work. Realizing the difficulty of selection, Wrenn attempted to develop a profile of the ideal counselor. In doing so, he administered the "Millers Analogy Test" (MAT), the MMPI, the SVIB, the "Allport-Vernon-Lindzey Study of Values" (AVLSV), and the GZTS. In evaluating the data, he found the MAT scores to be relatively high (mid-80s). The only significant difference between counselors and the norming population on the MMPI was the K scale while AVLSV results indicated counselors were high on theoretical and religious scales. The GZTS yielded higher than average scores on restraint, emotional stability, friendliness, objectivity, and personal relations. He cautions, however, that the results are not significant enough to develop lasting implications.

Two of the instruments used by Wrenn (1952) were also used in a similar study by Cottle and Lewis (1954). Cottle and Lewis administered the MMPI and GZTS to a group of 65 college counselors

and to 65 college students. A *t* test of the means of the two groups was computed for each of the scales. It was found that counselors scored higher on the K scale from the MMPI and lower on MMPI measures of Lying (L), Hypomania (MA), and Social Intraversion (SI). GZTS comparisons found counselors to be higher on Restraint (R), Sociability (S), Emotional Stability (E), Objectivity (O), Friendliness (F), and Personal Relations (P). The importance of these findings is paramount but they are somewhat diminished with the fact that the 65 college students were all undergoing extensive counseling. This fact tends to negate the strength of Cottle and Lewis's findings.

Another portion of Cottle, Lewis, and Penney's (1954) work was the development of a scale for use in counselor selection. By employing item analysis techniques, they found 51 MMPI items and 60 GZTS that differentiated between the college counselors and college students. The scale was found to discriminate successfully between counselors and people in general. Logue (1966) sought a validation of the Cottle, Lewis, and Penney scale and an experimental scale from the MMPI. He initially developed an "ideal" profile by making a synopsis of characteristics from previous studies. Both the Cottle, Lewis, and Penney scale and the experimental scale approximated the ideal profile although no prediction was available from the Cottle, Lewis, and Penney scale to criteria of grades or performance ratings.

In an attempt to establish normative data for rehabilitation counselors, Patterson (1962) administered the MAT, "Edwards Personal

Preference Survey" (EPPS), MMPI, SVIB, and the "Kerr-Speroff Empathy Test" (KSET) to 550 trainees at various institutes throughout the country. The mean MAT score for the group was at about the 80th percentile for education graduate students but at the 15th percentile for psychology graduate students. Mean scores from the EPPS were average on most scales. Females tended to be higher on Intraception and lower on Abasement while men were reported to be higher than average on Intraception, Deference, and Nurturance. The K scale, Masculine-Femininity (MF), MA, Depression (D), and Hypochondriasis (HS) scores from the MMPI were all elevated and only the SI scale was lower than the adult norming group. The KSET yielded a score for counselors which placed them slightly above the mean.

The data yielded in Patterson's (1962) research on rehabilitation counselors was later used as a basis for comparison for 447 National Defense Education Act (NDEA) school counselor trainees (Foley & Proff, 1965). Like Patterson's subject, this group was administered the MAT, EPPS, MMPI, and SVIB. Analysis of the resulting data was made in terms of cognitive domain (MAT), affective domain (EPPS and MMPI) and interests (SVIB). Group means from the MAT were found to be insignificant and comparisons of scores from the EPPS and MMPI scales were judged to be relatively meaningless. The comparison of SVIB means, however, appeared to be quite meaningful in terms of research that differentiated between Vocational Rehabilitation Counselors (VRC) and NDEA trainees. VRC counselors scored higher on Veteran's Administration psychologist, Clinical

psychologist, Experimental psychologist, and psychologist (revised) scales than did their NDEA counterparts.

One can infer that the VRC group scored higher on scales that reflect an interest orientation toward individual behavior deviations in a clinical setting while NDEA enrollees scored higher on scales that reflected more concern with and organization of more normative characteristics in a social setting [Patterson, 1962, p. 158].

Additional attention on the use of the SVIB and EPPS to describe counselors' personalities can be found in the work of Palmontier (1966). In comparing counselor profiles from these instruments to the profiles of people in general, it was found that counselor scores were significantly higher on the Social Welfare occupations scale. Counselors were also found to be higher on nurturance and affiliation as measured by the EPPS. The Kuder preference test was also administered to this group and elevated scores were noted in the social service, persuasive, literary and scientific areas.

Engen and Miller (1969) used the items from the SVIB to develop an interest scale for school counselors. From 340 respondents, 203 male counselors were selected on the basis of experience for comparison to a group of men in general. Of the items 59 were found to discriminate between the groups. Scores from the experimental scale were correlated with existing SVIB scales and significant positive correlations were found with social service scales. Negative correlations were found with the physical and

biological sciences. Correlations with nonoccupational scales showed male counselors to be high in academic achievement and a bit more feminine and extroverted than men in general.

Six scales from the CPI were used by Moredock and Patterson (1965) to study groups of counseling students. The Sy, Sp, Sa, To, Ie, and Fx scales were used in conjunction with the Rokeach Dogmatism (Form D) and Opinionation (Form C) scales. Students were grouped at various levels of professional preparation. Scores tended to increase with the level of training averaging about one standard deviation above the mean for practicum students. Dogmatism tended to decrease as professional preparation rose and the opinionation score for all groups was lower than the norming groups' mean. These scale scores yield a description of counseling students as being high in social skills, self-acceptance, intellectual efficiency, tolerance, and flexibility and relatively low on opinionation while dogmatism decreased as training increased. This is not to say that training affected any of the scores. In fact, there were no changes between scores at the beginning and end of the term.

Mahan and Wicas (1964) used three relatively unique instruments to assess a variety of personality variables:

- a. the Ways of Life, a series of 13 paragraphs describing differing philosophies of life;
- b. Self-Description, a forced choice adjective check list providing a profile measuring dominance, inducement, submission, and compliance; and
- c. the "Structured Objective Rorschach Test" (SORT), a forced

choice, group administered version of Rorschach technique (p. 79). Each measure was administered to each of 25 students and means computed. Analysis of mean scores from the three instruments was consistent:

Ss appear as highly controlled, as sensitive to the expectations of society and authority, as "doers" rather than "thinkers," as defenders of the established order, and as rather repressed individuals not given to introspection or self-analysis [p. 81].

These results are upheld in a later study (Gallagher, 1968) who found highly rated counselors to be more conservative, reflective, stable, and socially concerned as well as less aggressive. Mahan and Wicas express concern over these findings and question the ability of a person of this type to facilitate a helping relationship.

To this point the purpose of personality instruments has been to describe ways in which counselors differ from people in general. Arbuckle (1956) describes differences between those trainees who were most frequently chosen by their peers and those who were least chosen. (Studies refining and expanding this approach are covered in the following section.) Each of 70 enrollees was given the MMPI, "Heston Personality Inventory" (HPI) along with the Kuder. On HPI scores only the confidence and home satisfaction scale differentiated between the groups, with the high rated scoring significantly higher in both. Those chosen most frequently tended to have "more normal" MMPI profiles scoring closer to the mean than low rated counterparts on HS, D, Paranoia (PA), Hysteria (HY), Schizophrenia (SC), Social

Introversion-Extroversion (SIE), and Psychothenia (PT) scales which supports previous findings (Cottle & Lewis, 1954). Kuder results strengthen Palmontier's (1966) findings in that those highly rated scored higher than those chosen least frequently on Social Service, Persuasive, Literary, and Scientific areas. In using this approach, Arbuckle moved to a more sophisticated level of research and found that differences found between high and low rated counselors, at least in this instance, were similar to the differences between counselors and people in general.

Before concluding the review of descriptive studies via personality instruments, we need to recognize their limitations. Patterson (1967) notes that:

The results of studies of the personality of counseling students, though yielding results which indicate that these students differ in expected directions from the norm groups on the measures used, are of little practical value, for the following reasons: (1) the differences, though statistically significant, are so small as to be of little practical significance or use; (2) when compared to scores of other college graduate students on some of the instruments, such as the MMPI, the scores of counseling students are little different; (3) although it is suggested that scores of students at the advanced practicum level of training are higher than the scores of beginning students, probably through a process of selection, it cannot be assumed that these students are better counselors, or better potential counselors, than the beginning counselors;

(4) there is some evidence (in the Mahan and Wicas (1964) study) that some counseling students do not appear to possess characteristics usually considered desirable in counselors. This suggests that there are differences in the concept of the nature and function of counseling and of the related characteristics of the counselor. Thus, while (5) it would appear to be desirable to study the characteristics of those functioning as counselors rather than counseling students, the differences in functions among those called counselors enter in. As is well known, there are many individuals carrying the title of counselor who are counselors in name only, functioning mainly as dispensers of information and services, administrators or managers of services, record keepers, test administrators and scorers, etc.

[pp. 71-72].

Comparisons of Effective and

Ineffective Counselor

Groups

A good example of the technique of comparing effective and ineffective groups of counselors against standardized personality scales is found in Brams's (1957) study of the relationship between personality variables and communication in counseling. Brams established groups of "effective" and "ineffective" counselors on the basis of supervisors' ratings of counselor trainee performance. Each trainee completed the SVIB, MAT, MMPI, "Berkeley Public Opinion Questionnaire" (BPOQ), "Bills Index of Adjustment and Values" (BIAV), "Taylor Manifest Anxiety Scale" (TMAS). In addition, the

number of credit hours in counseling was considered as a variable. From a multitude of variables, only one, the Tolerance for Ambiguity score from the BPOQ, successfully differentiated between the two groups. In a later study (Brams, 1961), the same battery of tests was administered to 27 graduate students with similar results.

Stefflre, King, and Leafgren (1962) utilized peer recommendations to establish groups of effective and noneffective NDEA institute trainees. The MAT, GZTS, EPPS, and Rokeach Dogmatism Scale were administered to the two groups and significant differences were determined by t tests. Those selected as effective counselors were significantly higher on EPPS measures of Deference and Order and lower on Abasement and Aggression. The effective counselors also scored lower on the Dogmatism scale. The inability of the MAT to distinguish between groups has been repeatedly supported (Brams, 1957, 1961; Joslin, 1965).

Wasson (1965) administered the MMPI, EPPS, MAT, the "Ohio State Psychological Examination" (OSPE), NDEA's "Comprehensive Examination in Guidance in Counseling" (CEGC), the SVIB, and the "Wisconsin Relationship Orientation Scale" (WROS) to 30 NDEA institute enrollees. Each enrollee was rated on tape performance and peer and staff ratings. The third rated highest were compared via t test to the lowest third and over 350 correlations were run between individual scale scores. Of the 350 correlations, only 6 were significant: MMPI Sc with staff ratings, EPPS Nurturance with counseling segments, EPPS Heterosexuality with peer ratings, CEGC with counseling segments and SVIB artist scale with counseling

segments and staff ratings. The "Wisconsin Relationship Orientation Test" (WROT) did not correlate significantly with scores from any other instrument but it did establish positive significant correlation with counseling segments, staff and peer ratings leading the author to assert the experimental value of the WROT in counselor selection.

The "Bennett Polydiagnostic Index" (BPI) was used to determine differences that exist in the self-concept, mature forces, values and the feelings toward other people on a nationwide sample of NDEA students (Kazienko & Neidt, 1962). Of the students, 124 male counselors were identified as "good counselors" and 115 were deemed "poor counselors" on the basis of professional staff ratings. Findings indicate that though both groups share many common attributes, the degree of intensity is generally marked to a degree of statistical difference. Differences between the groups are as follows:

Within the concept of the self, whereas the good counselor feels that he is serious and earnest, understanding, sympathetic, gentle, and often wrong in his judgment, the poor counselor does not seem particularly to recognize these qualities in himself; whereas the good counselor thinks himself to be patient and soft spoken, the poor counselor views himself as short on patience and tending to loudness of voice; whereas the good counselor is aware of his personal self-centeredness, the poor counselor does not attribute to any degree such a socially unfavorable trait to himself; and whereas the good counselor feels more domestic than social and not mechanical or industrial, the poor counselor sees

himself as normal in these respects.

As to motivation, the good counselor is concerned about possessing a measure of security but rejects the need for wealth. The poor counselor seems to be neither moved nor unmoved by the prospects of security and riches.

The good counselor rejects cunningness and shrewdness as leading to personal contentment whereas the poor counselor places an average value upon these characteristics. Whereas the good counselor believes that a person should have the right to be different, the poor counselor feels that happiness lies in conformance to group behavior. Whereas the good counselor does not value severity and strictness, the poor counselor would tend toward strict adherence of rules.

As to their feelings toward people in general, the good counselor views people as possessing an adequate measure of intellectual ability though being self-centered. The poor counselor tends to give others no particular credit for intellectual behavior nor does he view them as being especially self-preoccupied [Kazienko & Neidt, 1962, p. 122].

Combs and Super (1963) used the "Ways of Perception" scores for rank order correlation with 29 NDEA students who had been ranked by staff members using the order in which they would be chosen for employment as counselors. Perception scores were derived from student reaction to four human relations incidents. The investigators found that good counselors had internal as opposed to an external frame of reference and were more oriented toward people than things.

The good counselors perceived people as able rather than unable, dependable rather than undependable, friendly instead of unfriendly, and worthy instead of unworthy. The good counselor sees himself as identified rather than unidentified and freeing as opposed to controlling in his relationships.

Dole (1964) developed groups of most successful and least successful counselors using principle ratings and NDEA staff ratings in attempting to identify variables to predict counseling success. Both groups completed a vast battery of standardized tests (MAT, "Minnesota Teaching Attitude Inventory," Rokeach Dogmatism Scale, SVIB, and "Gordon Personal Profile") and each was given role play ratings, student ratings, a self-description and other means of data collection. In the final analysis, the most effective predictors when correlated with staff and principle ratings were the self-appraisal and undergraduate GPA. Those predictors judged as least effective were role playing ratings, pupil ratings, MAT scores, Empathy and Openmindedness as measured by the Rokeach Dogmatism Scale.

A study of a similar nature and design discriminated between most and least successful counselors through instructor ratings (Demos & Zuwayliff, 1966). All counselors were administered the AVLSV, the "Kuder Personal Preference Survey" (KPPS) and the EPPS. Although no significant differences were noted on either the AVLSV or the EPPS, the EPPS was found to yield significant differences on needs for autonomy, affiliation, nurturance, abasement, and aggression. Those who were rated most successful had greater needs

for nurturance and affiliation while the least successful scored higher on needs for autonomy, abasement, and aggression. Demos and Zuwayliff theorized that the EPPS would be a good selection instrument from the results of their study. In 1967, however, a review of this study by Mills and Mencke (1967) pointed out weaknesses in structural design as well as errors in calculation. In the end, the only remaining significant differences were in autonomy and affiliation.

A study by Wicas and Mahan (1966) obtained groups of effective and ineffective counselors by a combination of nominations from supervisors and peers. Comparisons were then made on three instruments, none of which yielded significant differences except the SORT. Significant differences were yielded on 4 of the 15 scoring categories. High ranked counselors tended to have higher scores on categories related to anxiety and conformity while scoring lower on measures of persistence and emotional responsiveness in comparison to low ranked counselors. Thus, the high rated counselors appeared to be more anxious, more alert and sensitive to others, more yielding to the demands of others, and more open to change than their lower rated counterparts.

In a study by Jansen, Robb, and Bonk (1970), instructors' ratings were utilized to distinguish the top and bottom quarters of counselors ranked on "overall competence." Comparisons between the two groups were made from the following data:

- a. chronological age,
- b. "Ohio State University Psychological Test" (OSUPT),

- c. "Cooperative English Test" (CET),
- d. GZTS,
- e. "Minnesota Teacher Attitude Inventory" (MTAI),
- f. grades in counseling practicum, and
- g. cumulative grade point averages.

Significant differences were observed on three of the GZTS scales.

"Competent" counselors appeared to be more sociable, more emotionally stable, and less ego involved than those rated low in overall competency.

A combination of instructor and peer ratings was employed by Puranajoti (1972). Separate ratings were solicited from students and faculty who used the Interview Rating Scale as a criterion measure. "Peer ratings of counseling success gave consistently significant relationships with instructor ratings of counselor success [p. 3701]."

With groups of successful and unsuccessful counselors thus defined, a correlation analysis was used to explore two criterion variables and 25 predictors taken from the CPI and the Personal Data Sheet.

The CPI scales had low relationships with students' performance in the counseling practicum; however, some scales (Dominance, Self-Control, Tolerance, Achievement by Independence, Communality, Flexibility and Femininity) did show low but significant relationships with students' performance for the male, the nonpsychology major, and the nonteaching experience group [Puranajoti, 1972, p. 3701].

Four of the CPI scales were found to differentiate significantly between high- and low-rated students in a pilot study for this dissertation. These include the scales of Dominance, Tolerance, Achievement by Independence, and Flexibility.

In an attempt to determine what measured nonintellective variables appear to be associated with judged counseling effectiveness, Johnson, Shertzer, Linden and Stone (1967) sought ratings from counselees, supervisors, and peers. Once nominations to groups were completed, comparisons were made utilizing the CPI, EPPS, GZTS, MMPI, and the SVIB. This combination of instruments offers a total of 88 scales for comparison. Of these, only five were found to be associated with the criterion measure of counselor effectiveness. The Architect (SVIB) and well-being (CPI) were identified as male predictors. The Schizophrenia (MMPI), Friendliness (GZTS), and Dentist (SVIB) scales were shown to be negatively associated with effectiveness for females. Of additional importance is the fact that although counseling effectiveness is an elusive term and has yet to be given concrete definition, "counselors, peers, and supervisors appeared to be largely in agreement in judging effective counselors [p. 303]."

Phillips (1970) implemented the effective/ineffective approach in using the MMPI to study differences in those functioning as marriage counselors. He found that those who the instructors had rated in the top one-third of efficiency were significantly higher on the K scale and significantly lower on the D and PA scales when compared to the one-third judged efficient. In addition, the MA and SI scales approached significance (.10) with the effective counselors

lower on the MA scale and higher on the SI measurement.

McClain (1968) sought instructors' ratings of taped interviews of 137 experienced counselors in a NDEA institute. Criteria for the rating was positive counselee change. When groups were established, a multiple regression equation was calculated from the traits measured by the 16 PF test. When applied to the population of counselors, it successfully discriminated (.05) between high and low and high and medium groups. The superior group was found to be less tough minded, more venturesome and happy-go-lucky.

Once he had established high and low groups, based on the criterion of "level of predicted success," Blocher (1963) implemented the use of a multiple regression equation to predict success in a counselor education program. Groups were established by rankings of four staff members whose ratings correlated highly. Blocher utilized peer rankings, the NDEA Comprehensive Exam, Kuder and grades. A combination of these predictors yielded a correlation of .77 with instructor ratings. The research suggests that "peer ratings and the Kuder scores provide information which effectively supplements that provided by the other academic achievement measures [p. 22]."

In determining correlates of success, Jones and Schoch (1968) use peer ratings from sociometric techniques to establish groups of most and least effective counselors. Each counselor completed a battery of tests including the MAT, "Helping Relationship Inventory" (HRI), "Puttick Personality Inventory" (PPI) and the "Gordon Personal Inventory" (GPI). Results indicate very little

variance between the grades of those in the opposing groups but differences do occur on personality variables. The least effective counselors described themselves as experiencing anxiety, tension and were more persistent significantly more frequently than those who are most effective. Additionally, the HRI data indicates that the least effective counselor is significantly more probing in his counseling relationships than those who were judged most helpful.

In a similarly constructed study, Callis and Prediger (1964) assessed the value of the OSPE, MAT, and the CET: Reading Comprehension, as predictors of academic success in counselor training. Of the instruments examined, only part three of the OSPE (reading comprehension) was a consistently high predictor.

Donnan, Harlan, and Thompson (1969) and Swanson (1970) conducted studies using a correlational approach. In both studies, the 16 PF was administered and attempts made to correlate the 16 PF measures to unconditional positive regard, empathic understanding, and self-congruence as outlined by Rogers (1942).

Donnan, Harlan, and Thompson (1969) used the ratings from 880 clients to rank order the degree of positive regard, empathy, and self-congruence of 22 counselors as measured by the Relationship Inventory. In analysis of the data, positive regard scores were significantly correlated with Factor A (outgoing, warm-hearted, and easy-going). Congruence correlated significantly and positively with Factor I (tender-mindedness) and negatively with Factor C (mature, calm). Trust correlated with Factor H (venturesome, socially bold, uninhibited, and spontaneous). Empathic understanding failed to

correlate with any of the factors. These findings were supported by Swanson (1970) indicating that the 16 PF has potential as a predictor of counseling success. In looking at these correlative findings, the following description is offered:

Generalizing from these data, the counselor who was outgoing, warmhearted, and easy going was more likely to be perceived as offering a higher degree of unconditional positive regard. However, counselors with higher scores on the mature, calm factor were less likely to be rated as congruent. The counselor who was venturesome, uninhibited, and spontaneous was likely to behave in a way perceived as more trustworthy. The counselor who was tender minded and sensitive was more likely to be more congruent as perceived by clients.

Counselors rated high and low on congruence had significantly different average scores on Factors Q-1 and Q-2, indicating that the former were more experimenting, critical, analytical, resourceful, and self-sufficient. The high-functioning empathic understanding group also had significantly higher scores on Factor H which suggests they were more venturesome, socially bold, uninhibited, and spontaneous. The counselor group rated high on trust had significantly higher scores on Factor G indicating they were more conscientious. Conversely, the low-trust group scored higher on Factor Q indicating they were relatively apprehensive, worrying, depressive, and troubled [Donnan, Harlan, & Thompson, 1969, p. 484].

McGreevy (1967) performed a factor analysis of 47 different

variables that could have been related to counseling success. A majority of the variables were drawn from scoring categories of the MAT, MMPI, and EPPS. Faculty ratings served as the criteria against which these variables were compared. Through analysis, 14 factors were identified. Results support the use of the MAT and the EPPS change scale but rejects the value of the MMPI.

Research reported by Snyder (1955) divided a group of 423 counseling students into six groups. The continuum ranged from "good clinical psychologist" to "do not remember him." Rating intercorrelations ranged between .49 and .61 and were all significant at the .05 level. A t test of means between high and low rated groups yielded no significant difference on any of the MMPI scales. Group means for all groups approximated the expected mean of a college population. In addition to t score analysis of the data, a scale development via item analysis was attempted. Originally, 59 items were identified as differentiating between two or more groups. These items were later reduced to 11 in number and failed to discriminate between groups. Dole (1964b) used the same item analysis technique in developing the counselor evaluation scale which he found to correlate with the ratings of principals and state supervisors' ratings. Significant correlations were not obtained with scales from the MAT, SVIB, or MMPI. Additionally, Dole reports that

there seems then to be less room in school counseling for the creative, opinioned, slightly neurotic and independent maverick. As we have seen, openmindedness and intelligence were

not associated with counseling effectiveness [p. 143].

In summarizing the research comparing effective and ineffective groups, caution as to their value is urged. Note that

- a. independent studies often report different results for the same instruments,
- b. conclusions are inconsistent, and
- c. agreement is sparse.

Perhaps some of this variance can be accounted for in realizing that most of these studies deal with students rather than trained counselors. Most important, the criteria of effectiveness are not clear or not even stated. As a result, criteria undoubtedly vary among raters.

Hypothesized Characteristics of Effective Counselors

When Rogers (1942, 1961) first published and expanded upon the concept of client centered therapy, he gave impetus to what has since become a deluge of research on the hypothesized qualities that he felt to be essential to therapeutic progress. These hypothesized qualities are empathy, accurate understanding, counselor self-congruence and unconditional positive regard. Only a minute, but representative, portion of the research conducted on these hypothesized characteristics is represented herein.

An earlier contributor to the strength of Rogers's (1942, 1961) theory was Fiedler (1950a, 1950b, 1951) who demonstrated that the strength of the interpersonal relationship, the basis of Rogers's theory, is the most important factor in client change. Using

Steven's Q-sort technique, Fiedler (1950a) has shown that the type of relationship ideally sought by Freudian, Rogerian, and Adlerian theorists is essentially the same.

Significant research on the qualities of empathy, unconditional positive regard and self-congruence has been especially prevalent since the development of the Truax (1961, 1962a, 1962b) scales. An example of the application of these scales is seen in research reported by Bergin and Solomon (1963) who correlate empathic ability as measured by the Truax Accurate Empathy Scale to various personality instruments. A total of 18 interviews of students in internship were analyzed and rated to determine empathy scores. Empathy scores were then correlated with the EPPS, MMPI, GRE scores, and Grade Point Average. Positive correlation were found between Empathy and Dominance and Change as measured by the EPPS. Empathy also correlated negatively with EPPS consistency, order, and intraception from the EPPS and with D and PT scales from the MMPI. It is interesting to note that there was no significant correlations between empathy and GPA or GRE measures.

Truax and Carkhuff (1964) report a study on the effect of empathy, accurate understanding, and congruence and utilize the Truax scales to assess these qualities. A group of 32 patients received high degrees of these traits while a control group did not. Empathy, accurate understanding, and congruence were all significantly related to client progress. In fact, it was noted that, on the criteria of Rorschach and MMPI patterns, those who received high levels of the qualities examined made positive change while those who received low

levels regressed! These findings were upheld in a cross-validated study of therapists with different philosophic orientation (Truax, Wargo, Frank, Imber, Battle, Hoehn-Sariz, Nash, & Stone, 1966) indicating that they held a positive effect on client progress regardless of therapeutic approach.

Rogers (1962) and Truax (1963) in separate reviews of the research on empathy, positive regard, and congruence emphasized that research has upheld the importance of these qualities in client progress. Truax reports again that if high levels of these traits are present the chances are greatest for improvement. If low levels of the traits are perceived, the chances for client regression increase.

In a study to determine if varying amounts of empathy and positive regard as measured by the Relationship Inventory (RO), Dilley and Tierney (1969) evaluated responses from 30 NDEA candidates to eight situations from the "Wisconsin Counselor Education Selection Interview" (WCESI). Each candidate was rated on verbosity, fluency, judgmentalness, counselee focus, assumptiveness, and flexibility. That quarter scored highest on the empathy and positive regard measure (RO) were found to be significantly different in these elevated ratings on counselee focus, flexibility, and judgmentalness.

Sprinthall, Whiteley, and Mosher (1966) and Whiteley, Sprinthall, Mosher, and Donaghy (1967) introduce the concept of Cognitive Flexibility and hypothesize its importance to the counseling relationship.

Cognitive flexibility is an ability or capacity to think and act simultaneously and appropriately in a given situation. It refers to dimensions of open-mindedness, adaptability, and a resistance to premature closure in perception and cognition. Rigidity assumes the opposite, an intolerance of ambiguity or an excessive need for structure, a difficulty in adaptation, especially to ambiguous situations.

Applied specifically to counselor effectiveness, the flexible counselor, for example, can respond easily to both the content of what the client says and his feelings [Whiteley, Sprinthall, Mosher, & Donaghy, 1967, p. 227].

To test their hypothesis of the importance of cognitive flexibility to the counseling process, the investigators obtained supervisors' ratings and gave projective tests (Thematic Aperception Test [TAT] and Rorschach) to 19 counseling students who had completed their practicum experience. The "Personal Differentiation Test" (PDT), a measure of cognitive flexibility, plus reactions to two case studies were also available. They found that cognitive flexibility as derived from projective measures correlated positively with supervisors' ratings of competence whereas the MAT and GRE did not.

Cognitive flexibility was later studied as one of six variables thought to differentiate between groups of most and least counselors (Jackson & Thompson, 1971). Cognitive flexibility, tolerance of ambiguity and attitudes toward self, most people, most clients and counseling were all thought to be significantly higher

in the most effective groups. Groups were established by audio and video tape ratings on the criteria of client movement, self-understanding and self-acceptance. In this research, cognitive flexibility and tolerance for ambiguity did not differentiate between the nominated groups but the most effective counselors were significantly more positive in their attitudes toward self, most people, most clients and counseling.

Hypotheses for Gruberg's (1969) research dealt with tolerance for ambiguity, he felt that those counselors who were less tolerant would be more directive in their approach while tolerant counselors would be client centered. Further, he felt that judges would rate those most tolerant as being more effective in counseling. Tolerance for ambiguity was rated by the complexity scale from the "Omnibus Personality Inventory" (OPI). Of 137 counselors, the 10 lowest and highest were selected for comparison in addition to 5 randomly selected from the middle. In tape analysis of the work of these counselors, he found that the high scores on tolerance for ambiguity were more clarifying and used more accepting leads while low scorers were more diagnostic, interrogating, and advising in their technique. High rated counselors were found to have greater tolerance for ambiguity.

Bandura (1956) examined the effect of anxiety level and self-insight of 42 therapists to determine their effect on counseling competence as rated by supervisors. Each therapist rated himself and each other therapist on the amount of anxiety regarding dependency, hostility, and sex that they felt they had.

Self-insight was the degree of difference between self and group ratings. Bandura found that the least competent were significantly more anxious than the most competent counselors although there was no relationship between self-insight and competence. The fact that many who were rated highly anxious by the group, also rated themselves as anxious, led to the conclusion that the recognition of anxiety is not sufficient to clear the way for the effective counseling of others.

Petty (1971) considered the use of the Rokeach Dogmatism Scale for use in counselor selection. Again, instructors' ratings of most effective and least effective counselors were utilized. He found that the Rokeach Dogmatism Scale was not a valid predictor over a one-year period but that Dogmatism scores decreased after seven months of counselor training.

In studying the relationship of Dogmatism and prejudice to counseling effectiveness, Milliken and Paterson (1967) predicted that as counselor effectiveness (as measured by the Counselor Effectiveness Scale) rose, prejudice and Dogmatism scores would decrease. The Bogardus Ethnic Distance Scale and Rokeach Dogmatism Scale were used as measures of these traits. Analysis of the data statistically support one of eight hypotheses while the remaining seven are all in the hypothesized direction.

Citing a statement by the ACES (1961) indicating that counselors should be openminded, Russo, Kelz, and Hudson (1964) used the Rokeach Dogmatism Scale to determine differences of Dogmatism between counselors on the openmindedness variable. A total of 30 counselors were rated

on the Counselor Performance Rating Scale on tapes with coached clients. A high positive correlation (.64) existed between judges' ratings and counseling success indicating that openmindedness is an important counselor quality.

Thomas (1968) hypothesized that Self-Disclosure and Self-Concept of counselors was related to counseling success. To determine the extent of this relationship, a Self-Disclosure Questionnaire and Embree Q-Sort were administered in a pretest, posttest format to 30 counseling trainees. At the end of a year, each trainee received ratings from their advisors. The investigator found significant increases in Self-Disclosure over the year but the hypothesis that Self-Disclosure and success in counseling were related was rejected. Degree of change in Self-Concept, however, was significantly related to advisors' ratings of success.

In a similarly designed study, Backus (1970) examined Irritation-Tolerance as a factor in counseling success. An Annoyance Rating Scale, an objective measurement of acceptance, was administered to most effective counselors, least effective counselors, a college population, high school population, and a group of adults with less than high school educations. Annoyance ratings significantly discriminated between the most effective counselors and all other groups with the exception of least effective counselors. These feelings led the investigator to conclude that as the educational level rises, the level of tolerance increases.

Summary

The review of the literature reported in this section has been

presented in sections consistent with the various approaches utilized in studying the nonintellective personality variables essential to counseling. The following categories are represented:

- a. the need for personality assessment in counselor selection,
- b. speculated characteristics considered essential in an effective counselor,
- c. counselor descriptions via personality instruments,
- d. comparisons of effective and ineffective counselor groups,
- e. hypothesized characteristics of effective counselors, and
- f. the summary.

The literature indicates that the need for assessing the nonintellective or personal qualities in potential counselors has long been recognized (ACES, 1961, 1964; APGA, 1963; NVGA, 1949). Research negating the value of intellectual criteria (Joslin, 1965; O'Hern & Arbuckle, 1964; Stoughton, 1957) has encouraged examination of nonintellective criteria but research on selection remains sparse (Barry & Wolf, 1958; Patterson, 1967). A possible reason for the scarcity of research in this area may be the difficulty involved in identifying satisfactory criteria of effective counseling (Hill, 1961; Hill & Green, 1961). Whatever the reason or combination of reasons involved in this lack of research, it has resulted in relying on selection techniques realized to be inadequate (Keppers, 1961; Patterson, 1962).

Speculation on characteristics necessary for effective counseling is led by numerous professional organizations (ACES,

1964; NVGA, 1949). Generally, these subjective listings tend to describe an idealized personality whose qualities epitomize psychological health. Additional subjective listings have come from surveying counselors (Hamrin & Paulson, 1950) and potential clients (McQuary, 1964). Cottle (1953) points out that while research of this type is beneficial, it is limited in that it deals with opinion, does not distinguish between counselors and people in general and does not consider trait interaction.

Early research in developing counselor descriptions utilizing personality instruments is exemplified by Wrenn (1952), Cottle and Lewis (1954), Patterson (1962), and numerous others. Researchers have used the MAT, MMPI, SVIB, AVLSV, GZTS, CPI, Kuder, EPPS, Ways of Life, SORT, and numerous others to determine the ways in which the counselor differed from the general populace. Though the use of these instruments for obtaining an overview of counselor characteristics is unchallenged, their value in the selection process is negligible (Patterson, 1966).

A bulk of the research in counselor selection is developed on comparisons of effective and ineffective groups of counselors. The problem of criteria selection for placement in one or the other of these groups is central to the problem of counselor selection. Most often rating is performed by supervisors, peers, clients, principals, or combinations of each. The basis of rating may be nonexistent or defined by client progress, degree of empathy, positive regard, or improved client self-concept. Predictors for this type of study are typically the same utilized in the

personality assessment of counselors in general. In summarizing research of this type, Shertzer and Stone (1966) note that:

An overriding conclusion to be drawn from a review of the literature pertaining to interests and personality characteristics and counseling effectiveness is that the findings so far have been inconclusive and often conflicting and that additional research is needed [p. 118].

A majority of the research on hypothesized characteristics in effective counseling is a direct result of Rogers's (1942, 1961) writing on client centered therapy. Rogers's emphasis on empathy, accurate understanding, and congruence stresses the importance of the interrelationship between client and counselor and was later supported by Fiedler (1950a, 1950b, 1951). More recent work (Bergin & Solomon, 1963; Rogers, 1962; Truax, 1963, Truax & Carkhuff, 1964; Truax et al., 1966) all offer statistical support to the importance of empathy, accurate understanding, and congruence. In fact, the client who is encountered with low levels of these traits is very likely to regress (Truax, 1963).

Cognitive flexibility, " [the] ability or capacity to think and act simultaneously and appropriately in a given situation," is identified by Sprinthall, Whiteley, Mosher, and Donaghy (1967, p. 227). Cognitive flexibility was found to correlate significantly and positively with supervisors' ratings of success. In a later study (Jackson & Thompson, 1971), cognitive flexibility failed to differentiate between groups of effective and ineffective counselors. Attitudes toward self, others, most clients, and counseling were

examined and found more positive in effective counselors.

Gruberg (1969) researched the trait of tolerance for ambiguity and found it to be significantly higher in highly rated counselors. In studying self-insight and anxiety level, Bandura (1956) found that least competent counselors were significantly more anxious than the most effective counselors.

Petty (1971) correlated counseling success with the Rokeach Dogmatism Scale. He found that the Rokeach Dogmatism Scale was not a valid predictor in a follow-up rating one year later. Dogmatism did, however, decrease with counselor training. Positive results for Rokeach Dogmatism Scale scores were indicated by Milliken and Paterson (1967) who noted a decrease in counseling effectiveness as dogmatism and prejudice rose. Rokeach Dogmatism Scale scores followed this same pattern and decreased as counseling effectiveness increased indicating that the supposed opposite of dogmatism, openmindedness, is an important counselor quality (Russo, Kelz, & Hudson, 1964).

Thomas (1968) found that over a year of study, self-disclosure incurred significantly but was not related to counseling success. The degree to which self-concept changed, however, was significantly related to counseling success. The overall conclusions to be drawn from this review are as follows:

- a. research dealing with the actual use of objective assessment of nonintellective personality variables is still as sparse as it is necessary,
- b. research that does exist has been contradictory and

inconclusive, and

c. there are no universally acceptable criteria for successful counseling though the qualities of empathy, accurate understanding, and counselor self-congruence seem to hold the greatest potential and cross-theoretical application (Patterson, 1966; Truax et al., 1966).

It is a combination of the findings of this review of the literature and research involving empirical scale development (Anastasi, 1968; Kerlinger, 1964; Meehl, 1949) that has given impetus to the present research.

Chapter 3

Methodology

The specific purpose of the investigation was to develop a Counselor Selection Scale that would, in an objective manner, successfully discriminate between candidates for counselor training who possess varying degrees of potential for counseling success. Items for inclusion on the scale are derived by item analysis as indicated in the theory base of empirical scale development techniques (Fiske, 1971; Gough, 1957; Kerlinger, 1964).

Chapter 3 includes the procedures and methods of research. Description of the following are presented herein:

- a. research design,
- b. criterion groups,
- c. validation groups,
- d. methods of procedure, and
- e. statistical methods.

Research Design

The research design implemented in this study is that of the empirical approach to scale development. This approach is based upon determining those verbal stimuli, or independent variables, that differentiate between dichotomously appointed criterion groups in an objective and statistically significant manner. To meet the requirements of the empirical scale development technique, it was necessary to:

- a. identify criterion groups,

- b. administer the original body of items;
- c. conduct an item analysis of these items to determine those which successfully discriminate between the two criterion groups; and
- d. after incorporating significant items on an experimental scale, determine if the scale is a successful discriminator by applying to validation groups.

Criterion Groups

The criterion groups used in the study were drawn from a total population of 130 practicing school counselors. The number represented in the total population is a combination of counselors from two separate school systems. The first of these systems is located in an urban area and is served by 90 full-time counselors. Of these counselors, 70 participated in the current study. The second cooperating system is staffed by 59 full-time counselors. All of the counselors in this system participated in the study resulting in a N of 130 and a return of 86.5%.

Of the 130 participating counselors, 101 or 77.6% were females and 29 or 22.4% were males. Of those surveyed, 83% had attained at least a Master degree in Counseling while 17% of these counselors had less than this amount of professional preparation. The counselors responding are believed to be representative of the entire spectrum of school counselors in that elementary, intermediate, and high school counselors were surveyed. Each counselor had been known by his supervisor/judge for at least one academic year.

Validating Group

The validating group consisted of counselor trainees from the College of William and Mary, Williamsburg, Virginia; State University College of Education, Oneonta, New York (SUCO); and Old Dominion University, Norfolk, Virginia (ODU). There were 104 students from the College of William and Mary, 40 from SUCO, and 56 from ODU for a total of 200. These students were at various stages of professional training with the number of graduate hours in counseling ranging from 6 to 75 credit hours. Of those responding, 97 or 47.6% were females and 107 or 52.4% were males. Each participant had been a student of one or more of the judges for a minimum of one semester.

Methods of Procedure

The following methods of procedure were utilized to develop the CSS.

Data collection. At the outset of the study it was necessary to develop definitions of most and least effective counselors in order to establish in as exacting a way as possible groups representative of opposing extremes of counseling success. Such definitions were developed by synthesizing definitions that emerged from the Truax Scale of Empathy (1961), Accurate Understanding (1962a), and Self-Congruence (1962b). These traits are utilized due to their frequent and consistent relationship to Counseling Outcome (Patterson, 1966) and their Universal Applicability (Truax et al., 1966). Definitions of most and least effective counselors, in the form given to judges, appear in Appendix B.

Once the synthesized definitions of most and least effective

counselors had been developed, they were given to supervisory personnel who had agreed to act as judges. The judges were instructed to nominate that 25% of their counselors who approximated most closely the most effective counselor description to the most effective group while that 25% who approximated most closely the least effective counselor description were so assigned (Appendix B).

Simultaneously, the counselors participating were requested to complete the CPI. In so doing, they were instructed that:

- a. the inventory was being used to develop normative data;
- b. to respond to the CPI as though he were describing himself;
- c. their responses and test scores would in no way affect their retention, promotion or tenure status;
- d. that confidentiality was guaranteed; and
- e. their individual profiles would be discussed with them upon request.

Identical procedures were used with members of the validating groups.

Treatment of the data. The subjects who participated in the study were originally divided into two groups: the criterion group and the validating group. All answer sheets from the respondents in both of these groups were hand scored on each of the 18 scales of the CPI. Utilizing the descriptions that were formulated by synthesizing the descriptions that emerged from the Truax Scales (Truax, 1961, 1962a, 1962b), judges nominated subjects to the top or bottom quartiles of counseling proficiency. In so doing, 32 counselors were placed in the most effective groups and 27 in the least effective

group. The inequality in group size is accounted for by the absence of data on five of the counselors who were judged to be least effective. By comparing responses of those in the criterion group who were rated most effective to the responses of those in the criterion group who were rated least effective, an item analysis was made to determine which items distinguished between the groups ($p < .10$). In the analysis of items, each item was treated as an independent variable whose discriminatory power was determined by a chi square test.

The validating groups, similarly divided into most and least effective quartiles, were scored on the original 18 scales from the CPI and were also scored with the items which discriminated at $p < .10$ between most and least effective counselors from the criterion group. These items constituted the CSS.

In the combined validating group from SUCO and the College of William and Mary, 36 were rated most effective and 36 were judged as the least effective counselors. The sample from ODU had 14 in the most effective group and 14 rated as least effective.

Processing the data. Upon their return, each instrument for those in criterion and validation groups was hand scored on each of the 18 scales on the CPI. After the data had been placed upon punch cards, they were processed by the College of William and Mary Computer Center on an IBM 360/50 digital computer. Subsequent print-outs furnished the investigator with means and standard deviations of scale scores on item analysis of the 480 CPI items, t tests between means of all scales, and a 19 x 19 intercorrelation matrix of the 18

CPI scale plus the CSS.

Statistical Methods

The statistical methods employed in the treatment of the data were designed to:

- a. determine those items on the CPI that would distinguish between most and least effective counselors whose proficiency was determined by judges' ratings,
- b. determine the success of the subsequently developed scale to distinguish between counseling trainees who were similarly rated,
- c. determine significant differences between most and least effective counselors on the 18 published CPI scales, and
- d. determine the intercorrelations of all published and experimental scales.

The responses of the 59 subjects comprising the most and least effective members of the criterion group were analyzed to determine their discriminatory power.

The responses to each of the 480 items of the CPI were tallied in a four-celled 2 x 2 contingency table (see Table 1). Item analysis was accomplished by utilizing the "Crosstabs" procedure from the Statistical Package for the Social Sciences (Nie, Bent, & Hull, 1970). The "Crosstabs" procedure yields a corrected chi square statistic and indicates the number of degrees of freedom as well as fundamental cell summations and response percentages. The first figure in each cell indicates the number of the group (hi or low) which responded in a given scoring direction (true or false). The second figure in each cell indicates the percentage of the hi or

Table 1
 Example of Computer Printout Yielded
 by the SPSS Crosstabs Operation^a

	Count	Variable 030		
	row			
	column			
	total	True	False	
Variable 481	(%)	1.00	2.00	Total
Hi	1.00	30.00	2.0	32.00
		93.80	6.3	54.20
		60.00	22.2	
		50.80	3.4	
Low	2.00	20.00	7.0	27.00
		74.10	25.9	45.80
		40.00	77.8	
		33.90	11.9	
		50.00	9.0	59.00
Column Total		84.70	15.3	100.00

^aCorrected chi square = 2.99556 with 1 degree of freedom.

low group responding in a given scoring direction while the third figure indicates the percentage of responses in a given scoring direction that is accounted for by the nominated group. The final figure in each cell accounts for that portion of the total response that is attributable to that cell. Those items retained for inclusion on the CSS all met the minimum requirement of significance at $p < .10$. Levels of chi square significance were determined by Table 14 of Tables for Statisticians by Arkin and Colton (1950, p. 121).

The second statistical procedure was the use of a series of t tests to determine the significance of difference between most and least effective counselors on each of the 18 published scales as well as the experimental scale. The t test procedure from the Statistical Package for the Social Sciences (Dawson, 1972) is used to calculate t scores. The significance of t scores was determined by Table 12 of Tables for Statisticians (Arkin & Colton, p. 116).

The final statistical computation was the development of a 19 x 19 intercorrelation matrix which yielded intercorrelations between the 18 published CPI scales and the newly developed CSS. The matrix was developed by using the "Pearson's R" procedure from the Statistical Package for the Social Sciences package and is intended to show the degree of interrelationship between the existing CPI scales and the CSS. The matrix was processed to determine and illustrate those scales from the CPI which show a relationship to the CSS.

Chapter 4

Results

The results of the study to develop a Counselor Selection Scale are presented in Chapter 4. Reported herein are the results of scale development through item analysis and the applicability of the CSS to counselor training candidates as measured by t test techniques. The results are presented in the following manner:

- a. item analysis results,
- b. criterion group score analysis,
- c. validating group I score analysis,
- d. validating group II score analysis, and
- e. summary.

Item Analysis Results

The initial step in facilitating the item analysis of the CPI was the identification of subjects judged to be representative of the extremes of most and least effective counselors. Utilizing the definitions derived from the Truax scales of Empathy (1961), Unconditional Positive Regard (1962a), and Self-Congruence (1962b), the 130 practicing counselors in the criterion group were divided into quartiles (see Appendix B). The most effective quartile (N=32) was compared to the least effective quartile (N=27) on the basis of subject responses to each of the 480 items of the CPI. Disparity in the size of the two extreme groups is due to the unavailability of data on five of those counselors rated as least effective.

The comparison of the group responses was made by calculating

item significance as determined by a series of chi square (X^2) statistics taken from a 2 x 2 contingency table. The CSS consists of those items that reached or exceeded the $p < .10$ level of significance. A chi square statistic of 2.706 was required to reach the $p < .10$ level of significance while a value of 3.841 was necessary to obtain the $p < .05$ level of significance. To reach the $p < .02$ level of significance a X^2 value of 5.412 was required and a X^2 value of 6.635 was needed to attain the $p < .01$ significance level. Items reaching the prescribed significance levels and the appropriate scoring directions are reported in Table 2.

The item analysis procedure yielded 32 items that reached or exceeded the $p < .10$ level of significance. Of these, 17 were significant at the $p < .10$ level, 11 reached or exceeded the $p < .05$ level of significance, 2 were significant at the $p < .02$ level and the final 2 items attained the $p < .01$ level of significance.

In an attempt to determine the amount of item overlap between the CSS and the published CPI scales, a CPI answer sheet was marked so that each of the 32 items on the CSS would be counted and a maximum raw score of 32 would be attained. Thus, by scoring these responses with the keys for the published CPI scales, the overlap of items between the CSS and the 18 original scales could be determined.

Table 3 illustrates the number of items attributable to each of the published scales. Maximum contributors to the CSS were the Sp and Ie scales. Each of these scales contributed five items to the CSS while the Cs, Sa, and Py scales made no contribution. It should

Table 2
 California Psychological Inventory Items Reaching
 Specified Levels of Significance when Comparing
 Most Effective Counselors to Least Effective
 Counselors of the Criterion Group

Item number	Scoring direction	Signifi- cance level	Item
10	T	.05	Some people exaggerate their troubles in order to get sympathy.
14	F	.05	I always follow the rule: business before pleasure.
30	T	.10	I gossip a little at times.
41	F	.10	For most questions there is just one right answer, once a person is able to get all the facts.
48	F	.10	Most people would tell a lie if they could gain by it.
50	T	.10	I seem to be about as capable and smart as most others around me.
98	F	.10	People today have forgotten how to feel properly ashamed of themselves.
106	F	.10	The average person is not able to appreciate art and music very well.

Table 2 (continued)

Item number	Scoring direction	Signifi- cance level	Item
188	F	.05	I am quite often not in on the gossip and talk of the group I belong to.
202	T	.02	If given the chance I would make a good leader of people.
209	F	.10	Most people are honest chiefly through fear of being caught.
219	F	.10	Most people inwardly dislike putting themselves out to help other people.
222	T	.05	I would like to belong to a discussion and study club.
223	F	.10	I keep out of trouble at all costs.
240	T	.05	I would like to be a nurse.
281	F	.10	Society owes a lot more to the busi- nessman and the manufacturer than it does to the artist and the professor.
300	F	.10	Police cars should be especially marked so that you can always see them coming.
357	F	.01	For most questions there is just one right answer, once a person is able

Table 2 (continued)

Item number	Scoring direction	Signifi- cance level	Item
			to get all the facts.
364	F	.05	It bothers me when something unexpected interrupts my daily routine.
369	F	.10	I seem to do things that I regret more often than other people do.
377	T	.10	Most of the arguments or quarrels I get into are over matters of principle.
392	F	.05	I daydream very little.
396	T	.10	I sometimes wanted to run away from home.
408	F	.02	I always see to it that my work is carefully planned and organized.
415	F	.05	I have felt embarrassed over the type of work that one or more members of my family have done.
427	T	.05	There are a few people who just cannot be trusted.
428	F	.10	My home as a child was less peaceful and quiet than those of most

Table 2 (continued)

Item number	Scoring direction	Signifi- cance level	Item
			other people.
441	F	.10	I have often been frightened in the middle of the night.
456	F	.05	I have more trouble concentrating than others seem to have.
461	F	.10	It seems that people used to have more fun than they do now.
469	F	.01	I must admit that it makes me angry when other people interfere with my daily activity.
477	F	.05	I get tired more easily than other people seem to.

Source:

Gough, Harrison G. "California Psychological Inventory."

Table 3

The Degree of Item Overlap between the Counselor
Selection Scale and the Published Scales of
the California Psychological Inventory

Scale	Number of items	Overlap with CSS (%)
Do	2	6.2
Cs	0	0
Sy	3	9.3
Sp	5	15.6
Sa	0	0
Wb	1	3.1
Re	1	3.1
So	1	3.1
Sc	2	6.2
To	2	6.2
Gi	2	6.2
Cm	1	3.1
Ac	2	6.2
Ai	2	6.2
Ie	5	15.6
Py	0	0
Fx	3	9.3

Table 3 (continued)

Scale	Number of items	Overlap with CSS (%)
Fe	2	6.2
Total	34	105.6

be noted that the total number of items attributed to the published scales is 34 while only 32 items appear on the CSS. This discrepancy is accounted for through the use of some CPI items or more than one of the original scales.

Criterion Group Score Analysis

In developing the normative data on the CPI, Gough (1957) was highly cognizant of the effect demographic variables could have upon the outcome of personality assessment. Consequently, in an effort to control a portion of the variance attributable to outside variables, separate norms were developed on the basis of sex. In subsequent research, Gough developed norms according to occupation as well, thus providing a basis for comparative studies between sex and occupation. Comparison of criterion group data, therefore, will be made with like-sexed groups of college students and psychology graduate students. Data for these comparison groups is taken from the CPI Manual (pp. 34-35).

Profile comparisons. A cursory glance at the profile configuration of the 29 male counselors surveyed in the study reveals that the counselors' profile is quite similar to that of male college students (Figure 1). Each of the scores for the CPI scales in both groups is well within the normal range. Normalcy on the CPI is a t score value of 50 plus-or-minus a single standard deviation of 10 t score points.

Gough (1957) contends that higher scores on the CPI tend to indicate a greater degree of maturity and personal adjustment (p. 12). As the scores of the practicing counselors exceed those of college students on 12 of the 18 CPI scales, the counselors tend to present

PROFILE SHEET FOR THE *California Psychological Inventory: MALE*

Name _____ Age _____ Date Tested _____
 Other Information _____

Notes:

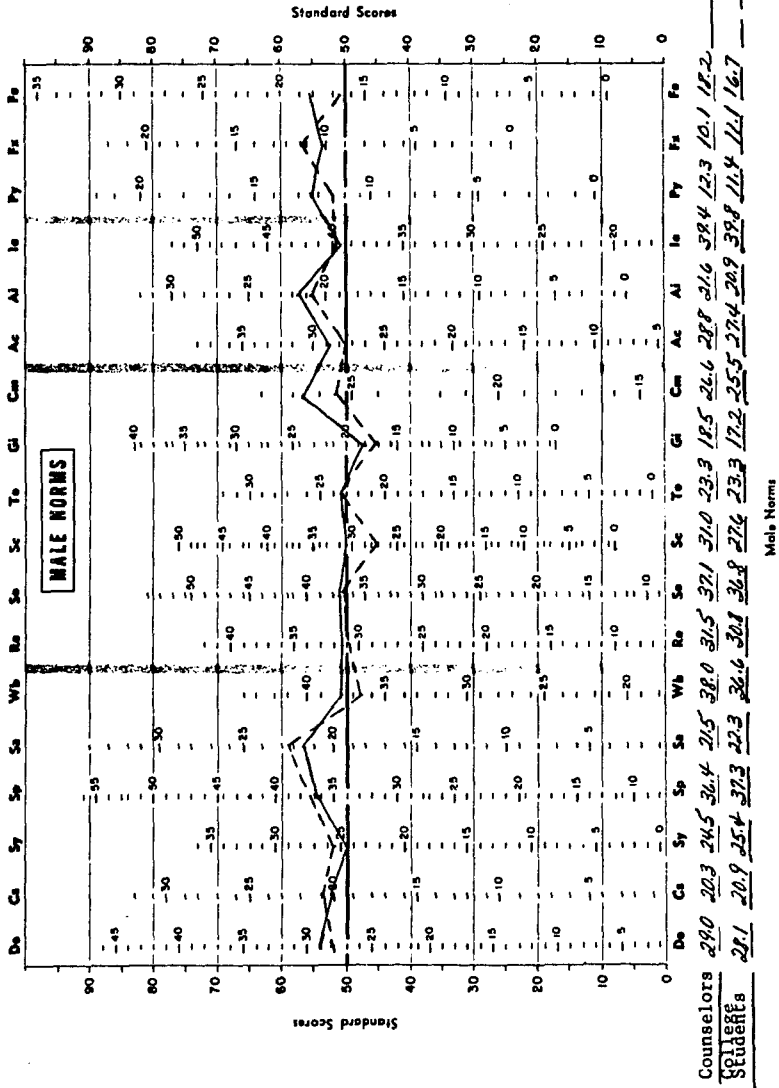


Fig. 1. Comparative profile configurations of male criterion group counselors and male college students.

a slightly more favorable profile. It should be noted, however, that none of the differences between counselors and college students approaches one standard deviation.

Although none of the counselors' norm scores exceed the mean by a standard deviation, relatively high scores were found on the Sa, Cm, Py, and Fe scales. The lowest scores for the counselor group was the Sy scale and all of the Class II scales which are measures of socialization, maturity, and responsibility (see Appendix A). Only one of these (the Gi scale), however, falls below the mean. Still, these scores exceed those of college students on the same measures as is generally the case for measures of potential and intellectual efficiency (Class III) and measures of intellectual and interest modes (Class IV). It is interesting to note that four of the six scales on which college students surpass the group of counselors are in the measures of poise, ascendancy, and self-assurance of Class I. (College students scored slightly higher than counselors on the Cs, Sy, Sp, and Sa scales.)

Summarizing these profiles, male counselors scored at or above average on 17 of the 18 CPI scales. As a group they are depicted as being slightly above average on measures of poise, ascendancy, and self-assurance; average on measures of socialization, maturity, and responsibility; and above average on measures of achievement potential and intellectual efficiency. Their counterparts in this comparison, college students, tend to follow similar scoring patterns. Generally, however, their scores are slightly lower. The exception to this pattern is in measures of poise,

ascendancy, and self-assurance. Both of the groups fall within the normal range on the scales designed to detect faking (Gi, Wb, and Cm).

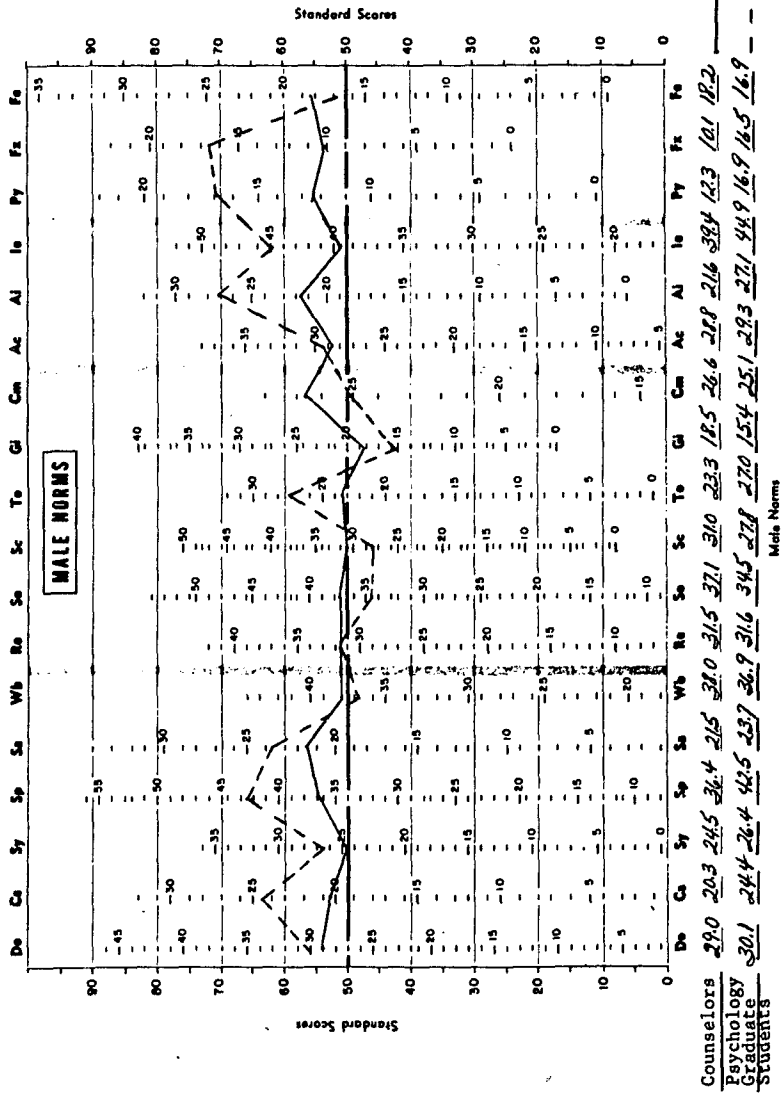
A comparison between male psychology graduate students and criterion group counselors (Figure 2) creates a reversal of roles for the school counselors. Instead of exceeding the comparison group on a majority of variable measures, counselors are surpassed on 11 of the 18 CPI scales. Psychology graduate students score far above average on measures of poise, ascendancy, and self-assurance (Class I), measures of achievement potential and intellectual efficiency (Class III), and measures of intellectual and interest modes (Class IV). Class II measures of socialization, maturity, and responsibility are the only measures that yield consistently higher scores for counselors.

Viewing the scales individually, there is no instance in which male counselors' scores are significantly greater than those of psychology graduate students. Psychology graduate students, however, exceed the counselor scores by a minimum of 10 t score points on the Cs, Sp, Ai, Ie, Py, and Fx scales. Consequently, psychology graduate students are depicted as being considerably more "ambitious," "clever," "imaginative," "forceful," "demanding," "efficient," "observant," "informal," and "adventurous" than their counselor counterparts. Perhaps a portion of the variance between these two groups can be accounted for by their average ages. Although data on this factor is unavailable, it is highly probable that the psychology graduate students are considerably younger and less

PROFILE SHEET FOR THE *California Psychological Inventory: MALE*

Name _____ Age _____ Date Tested _____
 Other Information _____

Notes:



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Fig. 2. Comparative profile configurations of male criterion group counselors and male psychology graduate students.

settled than are school counselors.

Looking back at both comparison profiles, it is immediately obvious that male school counselors most closely approximate the profile configuration of male college students as opposed to male psychology graduate students. This becomes important in the analysis of individual profiles of counselors. Due to the close relationship of counseling and psychology, one could logically assume that the profiles of counselors should be compared to those of psychology graduate students. The research indicates, however, that male college students are a more satisfactory comparison group.

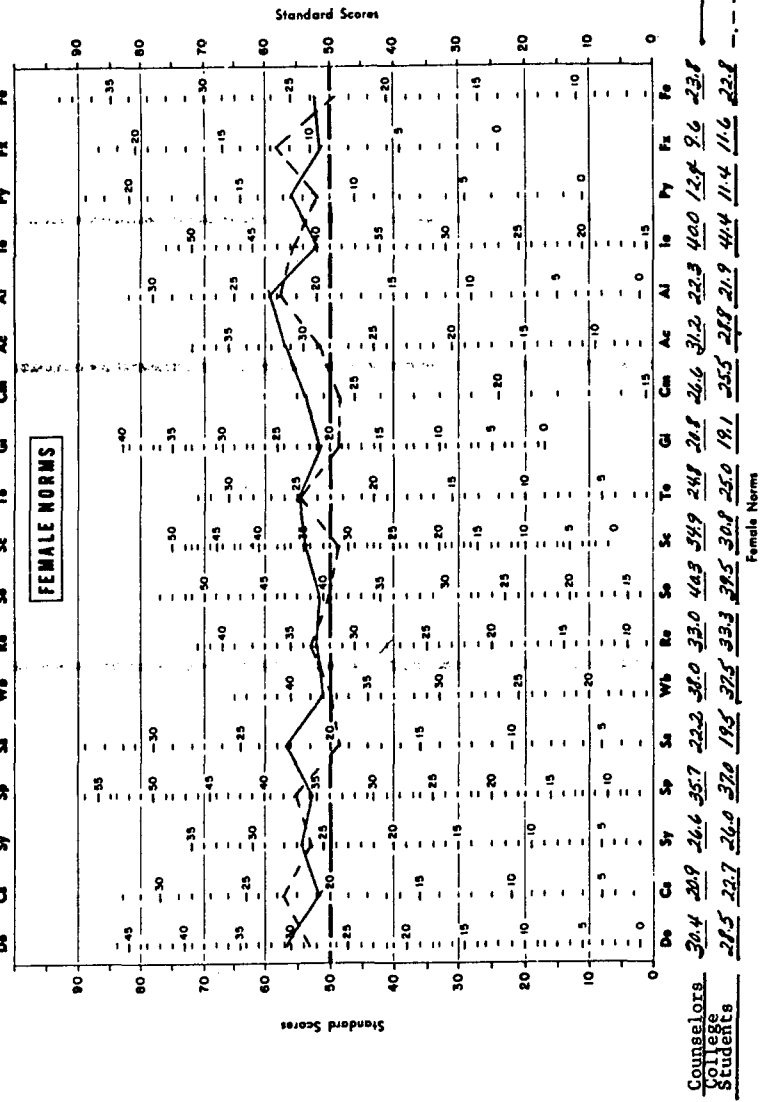
In comparing female counselors of the criterion group to female college students (Figure 3), it is apparent that none of the scores of these groups exceed the one standard deviation from the mean. As was the case with male counselors, the female counselors present a pattern of scores that is higher in general than those in the like-sexed college student group. Scores of female counselors exceed those of female college students on 11 of the 18 scoring categories although none of these scoring differences approaches significance.

Examination of the female counselor profile configuration reveals that while none of the scores varies significantly from the mean of 50, the Sa, Ac, Ai, and Py scales are relatively high scores. None of the scores can be considered low as they all exceed the mean. Like the male counselors, the criterion group females' lowest scores are found in the Class II measures of socialization, maturity, and responsibility. Again, the female counselors surpassed female college

PROFILE SHEET FOR THE *California Psychological Inventory: FEMALE*

Name _____ Age _____ Date Tested _____
 Other Information _____

Notes:



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Fig. 3. Comparative profile configurations of female criterion group counselors and female college students.

students on these measures. High scores for female college students were in Cs, Sp, Ai, and Fx. As the Cs and Sp exceed those of the female counselors, it is probable that social life and status are slightly more important to the college students.

In summary, it is noted that female counselors of the criterion group scored above the mean on all of CPI scales. While scores from measures of poise, ascendancy, and self-assurance (Class I), measures of socialization, maturity, and responsibility (Class II), and measures of intellectual and interest modes (Class IV) are all slightly above average, the achievement potential and intellectual measures (Class III) are the highest scoring areas. While female college students tend to follow the same pattern as the female criterion group, their scores are generally lower. Both groups score near the mean on the Gi, Cm, and Wb scales which is ideal in that exaggerated scores on these scales indicate dissemination or faking.

Comparison of female counselors to female psychology graduate students on the basis of CPI profile configuration yields some significant differences but not as many as were found to exist between males of these groups. Like the males, female psychology graduate students have a profile much more erratic in nature than their counseling counterparts (Figure 4). While female psychology students surpass counselor scores on only 7 of the 18 CPI scales, they out-score female counselors in 3 of the 4 classes of variables. (Female counselors score higher on measures of socialization, maturity, and responsibility.)

Reviewing the scales individually, there is only one instance

PROFILE SHEET FOR THE *California Psychological Inventory: FEMALE*

Name _____ Age _____ Date Tested _____
 Other Information _____

Notes:

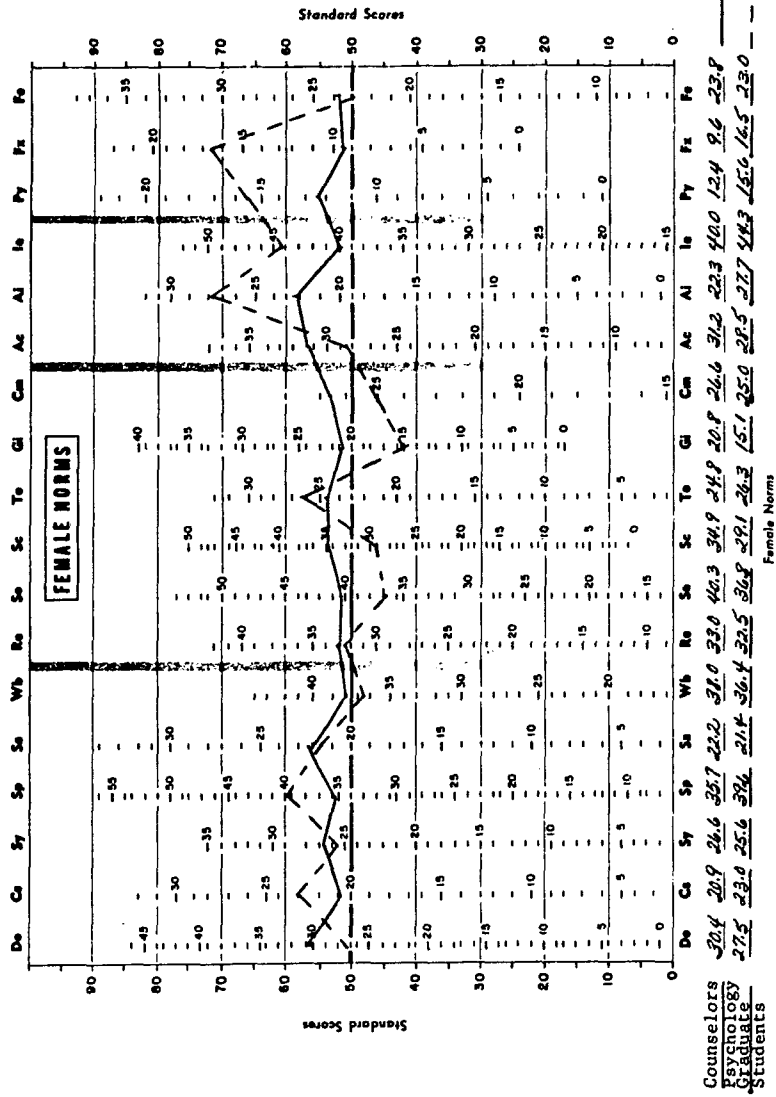


Fig. 4. Comparative profile configurations of female criterion group counselors and female psychology graduate students.

in which female counselors score a significant 10 t score points higher than female psychology graduate students and that is the Gi scale. This indicates that the female counselors tend to be more concerned with being "cooperative," "outgoing," and "creating a good impression [Gough, 1957, p. 10]." Conversely, female counselors were significantly lower than the graduate students on the Ai, Py, and Fx scales indicating that female psychology graduate students tended to be more "forceful," "strong," "spontaneous," "changeable," "adventurous," "confident," and "cynical." It is conceivable, as with the males, that age and the academic environment may account in part for the elevated scores on these variables. Finally, it is apparent that female counselors compare most favorably to female college students as opposed to female psychology graduate students. Until sufficient normative data is available on counselors, the sex related norms for college students seem to provide the most usable comparison group.

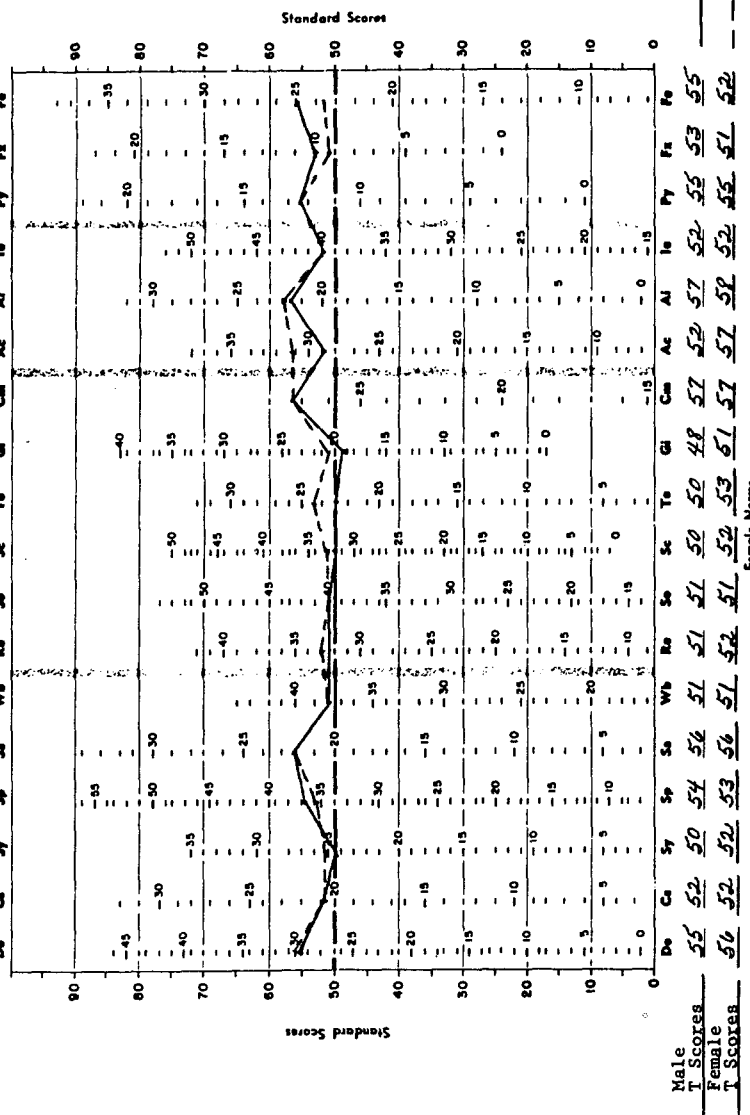
An additional comparison can be made between male counselors and female counselors by the utilization of t scores (Figure 5). In so doing, it was found that these groups were highly homogeneous in their respective profiles. Identical t score values were noted on seven of the scales (Cs, Sa, Wb, So, Cm, Ie, and Py) and females slightly exceeded males on the Do, Sy, Re, Sc, To, Gi, and Ai measures. One measure, Ac, showed a difference of five t score points but no significance can be attached to this difference. On the remaining scales (Sp, Fx, and Fe), males scored slightly higher than females.

PROFILE SHEET FOR THE *California Psychological Inventory: FEMALE*

Name _____ Age _____ Date Tested _____

Other Information _____

Notes:



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Fig. 5. Comparative profile configurations based on t score values of male and female criterion group counselors.

t test analysis. In order to determine the discriminating power of the published CPI scales and the CSS, a series of t test were run between the nominated quartiles of the criterion group. Subsequent data yielded the significance levels of differences between most effective versus least effective, most effective counselors versus the two middle quartiles and the least effective counselors versus the two middle quartiles.

Table 4 represents the group means, standard deviations, and t values of most effective criterion group counselors and those of the criterion group rated least effective. To reach the $p < .05$ level of significance with 57 degrees of freedom, a t value of 2.00 is needed. The Flexibility scale with a t value of 2.51 reaches this level indicating that those counselors rated most effective scored significantly higher on this variable. The Achievement via Independence variable has a t value of 2.69, thus reaching the $p < .01$ level. The strongest discriminator between the two groups is the CSS. A t value of 7.78 well exceeds the 3.460 t value necessary to reach the .001 level of significance ($p < .001$). This, however, is to be expected as the items for the CSS were selected on the basis of their ability to differentiate between these groups.

Data essential for t test procedures between most effective counselors and those in the two middle quartiles are contained in Table 5. As there are 101 degrees of freedom in the sample, a t value of 1.98 is essential for attaining the $p < .05$ significance level. A t value of 2.66 is needed to reach the $p < .01$ level while t must equal or exceed 3.37 to attain the $p < .001$ significance level. Of

Table 4
Means, Standard Deviations and t Values of
Those Criterion Group Subjects Assigned
to Most or Least Effective Groups

Variable	Mean	Standard	
		deviation	t value
Do--Most	30.8	5.25	0.42
Least	30.2	4.87	
Cs--Most	21.7	3.18	1.20
Least	20.6	3.56	
Sy--Most	26.0	4.42	0.69
Least	25.2	4.97	
Sp--Most	36.1	5.14	0.30
Least	35.7	4.68	
Sa--Most	22.0	2.96	0.83
Least	21.4	3.41	
Wb--Most	37.8	3.74	-0.28
Least	38.1	4.37	
Re--Most	33.4	3.50	0.64
Least	32.7	4.01	
So--Most	40.5	4.08	0.58
Least	39.8	4.96	
Sc--Most	34.6	5.38	-0.10
Least	34.8	6.27	

Table 4 (continued)

Variable	Mean	Standard	
		deviation	t value
To--Most	25.1	3.03	
Least	24.3	4.08	0.85
Gi--Most	20.9	6.36	
Least	20.9	6.70	-0.01
Cm--Most	26.5	1.54	
Least	26.6	1.39	-0.34
Ac--Most	31.7	3.57	
Least	30.2	4.90	1.35
Ai--Most	23.3	2.61	
Least	21.1	3.64	2.69**
Ie--Most	41.1	3.89	
Least	40.1	4.70	0.92
Py--Most	12.5	2.51	0.24
Least	12.4	2.50	
Fx--Most	10.6	2.96	2.51*
Least	8.4	3.89	
Fe--Most	23.0	3.06	1.92
Least	21.4	3.25	
CSS--Most	24.6	2.60	7.52***

Table 4 (continued)

Variable	Mean	Standard	t value
		deviation	
Least	18.0	3.95	

* $p < .05$

** $p < .01$

*** $p < .001$

Table 5
Means, Standard Deviations and t Values of
Those Criterion Group Subjects Assigned
to Most Effective and Middle Groups

Variable	Mean	Standard	
		deviation	t value
Do--Most	30.8	5.27	0.90
Middle	29.7	5.58	
Cs--Most	21.7	3.18	2.08*
Middle	20.4	2.80	
Sy--Most	26.0	4.42	-0.52
Middle	26.4	3.44	
Sp--Most	36.0	5.14	0.27
Middle	35.8	5.09	
Sa--Most	22.0	2.96	-0.23
Middle	22.2	3.37	
Wb--Most	37.8	3.74	-0.32
Middle	38.0	2.86	
Re--Most	33.4	3.50	
Middle	32.3	3.49	1.45
So--Most	40.5	4.08	
Middle	39.0	4.34	1.59
Sc--Most	34.6	5.38	
Middle	33.3	6.61	0.95

Table 5 (continued)

Variable	Mean	Standard	
		deviation	t value
To--Most	25.1	3.03	
Middle	24.2	3.51	1.25
Gi--Most	20.9	6.36	
Middle	19.7	5.44	0.95
Cm--Most	26.5	1.54	
Middle	26.6	1.18	-0.48
Ac--Most	31.7	3.57	
Middle	30.3	3.53	1.79
Ai--Most	23.3	2.61	
Middle	22.0	4.05	1.70
Ie--Most	41.1	3.89	
Middle	39.2	4.31	2.12*
Py--Most	12.5	2.51	
Middle	12.2	2.13	0.70
Fx--Most	10.6	2.96	
Middle	9.8	3.67	1.20
Fe--Most	23.0	3.06	
Middle	22.8	4.36	0.27
CSS--Most	24.6	2.60	

Table 5 (continued)

Variable	Mean	Standard	t value
		deviation	
Middle	21.2	2.96	5.64***

* $p < .05$

*** $p < .001$

the published scales, only the capacity for status ($t = 2.08$) and Intellectual Efficiency scale ($t = 2.12$) differentiate successfully at the $p < .05$ level. The CSS, however, differentiates between most effective and middle groups well beyond the $p < .001$ level.

Table 6 represents the differences between the middle quartiles and the lowest quartile. In this instance, a t value 1.98 is necessary to attain the $p < .05$ level. Examination of the results, however, reveal that only the CSS differentiates between the two groups with a t value of 4.41 which well exceeds the necessary value for $p < .001$ discrimination.

Validating Group I Score

Analysis

Validating group I consists of 148 trainees in the combined counselor education programs of the College of William and Mary and SUCO. In dividing the group according to sex, there are 82 males and 66 females whose normative scores will, like those in the criterion group, be compared to like-sexed college students and psychology graduate students.

Profile analysis. The similarity between the profile configurations of male counseling students and male college students is immediately apparent (Figure 6). Although the counseling students score higher than male college students on all scales, the distances are all slight. At no point do the profiles differ significantly as determined by one standard deviation of 10 t score points.

In isolating the profile configuration of the counseling students, three scales are found to vary significantly from the mean

Table 6
Means, Standard Deviations and t Values of
Those Criterion Group Subjects Assigned
to Middle and Least Effective Groups

Variable	Mean	Standard	
		deviation	t value
Do--Middle	29.7	5.58	
Least	30.2	4.87	-0.41
Cs--Middle	20.4	2.80	
Least	20.6	3.56	-0.36
Sy--Middle	26.4	3.44	
Least	25.2	4.97	1.42
Sp--Middle	35.8	5.09	
Least	35.7	4.68	0.09
Sa--Middle	22.2	3.37	
Least	21.4	3.49	1.10
Wb--Middle	38.0	2.86	
Least	38.1	4.37	-0.11
Re--Middle	32.3	3.49	
Least	32.7	4.01	-0.55
So--Middle	39.0	4.34	
Least	39.8	4.96	-0.74
Sc--Middle	33.3	6.61	
Least	34.8	6.27	-0.96

Table 6 (continued)

Variable	Mean	Standard	
		deviation	t value
To--Middle	24.2	3.51	
Least	24.3	4.08	-0.13
Gi--Middle	19.7	5.44	
Least	20.9	6.70	-0.90
Cm--Middle	26.6	1.18	
Least	26.6	1.39	0.01
Ac--Middle	30.3	3.53	
Least	30.2	4.90	0.16
Ai--Middle	22.0	4.05	
Least	21.1	3.64	0.97
Ie--Middle	39.2	4.31	
Least	40.1	4.70	-0.84
Py--Middle	12.2	2.13	
Least	12.4	2.50	-0.36
Fx--Middle	9.8	3.67	
Least	8.4	3.89	1.57
Fe--Middle	22.8	4.36	
Least	21.4	3.25	1.47
CSS--Middle	21.2	2.96	

Table 6 (continued)

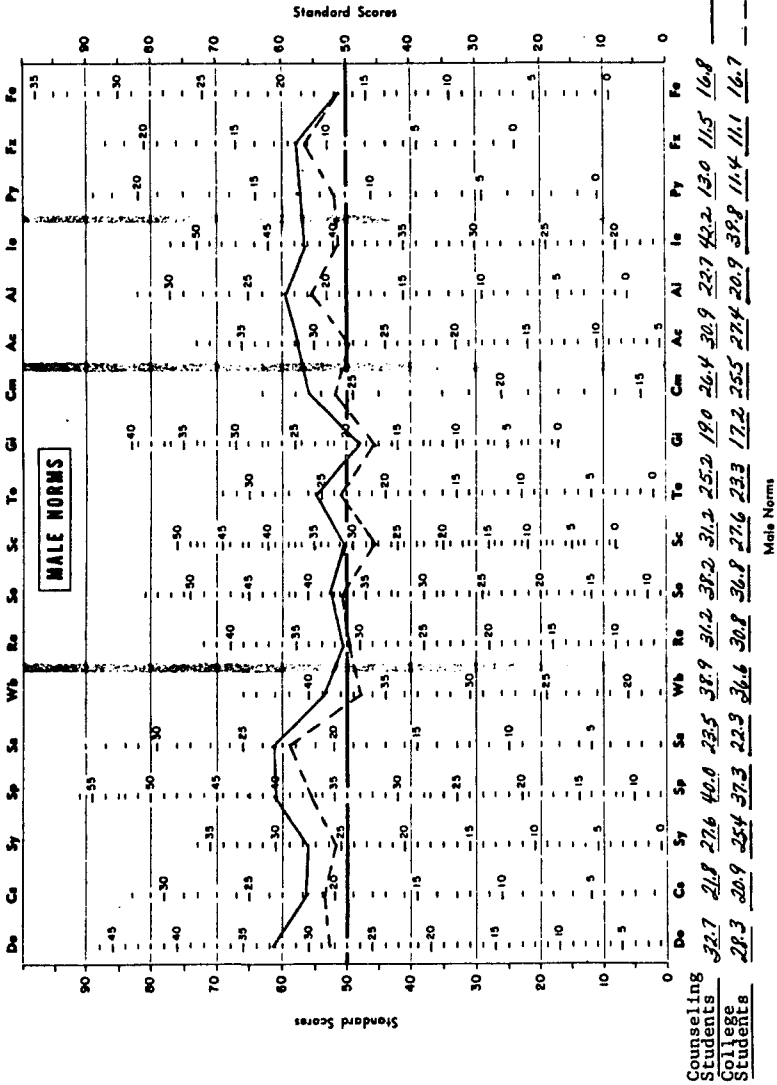
Variable	Mean	Standard deviation	t value
Least	18.0	3.95	4.41***

*** $p < .001$

PROFILE SHEET FOR THE *California Psychological Inventory: MALE*

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Fig. 6. Comparative profile configurations of male counseling students and male psychology graduate students.

of 50 t score points. The Do, Sp, and Sa scores differ from the mean significantly and the Ai scale may also be considered to be relatively high. High scores on these scales indicate that male counseling students tend toward being "aggressive," "persuasive," "enthusiastic," "spontaneous," "intelligent," "mature," and "autonomous."

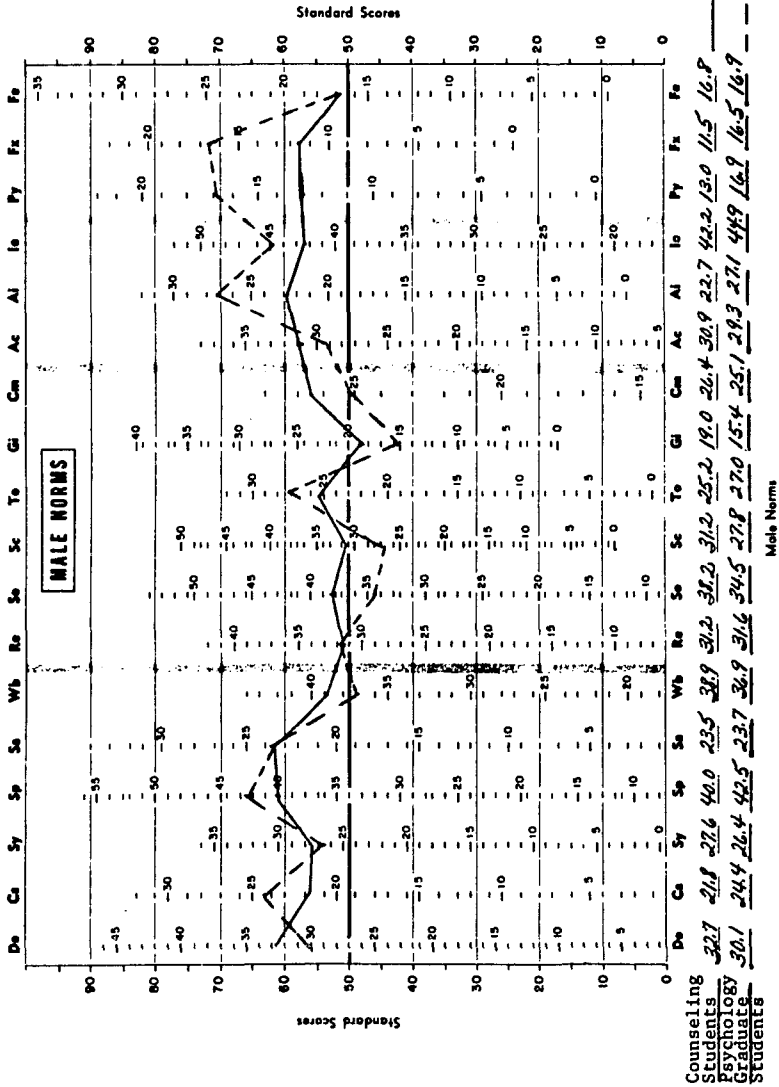
Only one scale (Gi) on the counseling student profile falls below the mean. Generally, however, the lowest group of scores is found in Class II measures of socialization, maturity, and responsibility. Scores from all other class groupings are well above the mean. In summary, it is noted that male counseling students scored above the mean on 17 of the 18 CPI scales. In so doing, they present a profile which is mirrored almost perfectly by male college students but approximately five t score points lower. Those scales designed to detect faking were well within the acceptable limits.

The comparison of profile configurations of the male counseling students in validating group I (Figure 7) to male psychology graduate students is much more homogeneous than that of male criterion group counselors and male psychology graduate students (Figure 2). Significant differences, however, do still exist. Male counseling students are found to score significantly lower on the Ai, Py, and Fx scales. At the same time, there is no instance in which male counseling students surpass the psychology graduate student counterparts. Elevated scores on the Ai, Py, and Fx scales indicate that psychology graduate students are more "forceful," "dominant," "demanding," "progressive," "intellectual," "idealistic," and more

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Fig. 7. Comparative profile configurations of male counseling students and male psychology graduate students.

highly concerned with personal pleasure and diversion. In considering scoring by classes, male counseling students were more elevated than male psychology graduate students only in measures of socialization, maturity, and responsibility (Class II).

In summary, male psychology graduate students exceeded the scores of male counseling students on 10 of the 18 CPI scales. Significant differences were noted in the Ai, Py, and Fx scales. Once again, the data demonstrates that the most valid comparison group for male counselors is male college students as opposed to male psychology graduate students.

In Figure 8, the profiles of 66 female counselor trainees and 2,120 female college students are presented. Both profiles follow relatively similar patterns but the female counseling students scored higher on 14 of the 18 CPI scales. The differences between the profiles tend to be slight and at no point does a standard deviation of difference exist.

Female counseling students, however, do differ from the mean by one standard deviation at the Ai and Fx scales while the Sp and Sa scales approach significance. Subjects scoring high on these scales are often described as "clever," "imaginative," "intelligent," "fluent," "mature," "forceful," "insightful," and "informal."

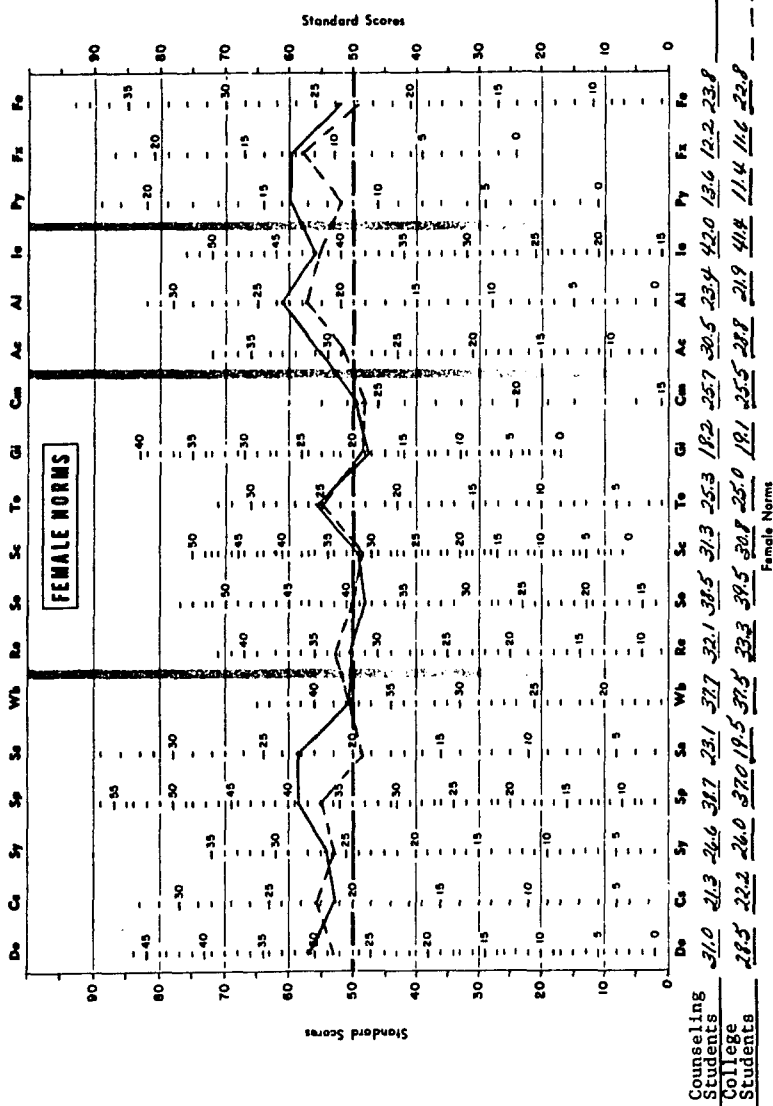
Low scores for female counseling students are noted in Class II measures. This trend, however, is relative in that the scores are only slightly below the mean. Both groups scored highest in measures of achievement potential and intellectual efficiency (Class III) and measures of intellectual and interest modes (Class IV).

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Fig. 8. Comparative profile configurations of female counseling students and female college students.

Female counseling students scored above the mean on 14 of the 18 CPI scales. They tend to score high on Class III and IV measures, relatively high on measures of poise, ascendancy, and self-assurance (Class I), and lowest (yet still average or above) in measures of socialization and maturity (Class II).

Inasmuch as the profiles of the practicing female counselors from the criterion group is highly similar to that of female counseling students (validating group I), the results of a comparison are almost identical. Again, the female counselors have a profile which is less erratic than the female psychology students (Figure 9). In this comparison, female counseling students are more elevated than female psychology graduate students on 10 of the 18 CPI scores but, as with the female criterion group, the female psychology students have generally higher composite scores in 3 of the 4 scoring classes. Female counselors are elevated above like-sexed psychology graduate students in socialization, maturity, and responsibility measures (Class II).

Differences between these two groups are particularly evident on the Ai and Fx scales. Although these differences are less pronounced than those between the female criterion group and female psychology students, the differences are still significant. Thus, the descriptive terms "mature," "dominant," "self-reliant," "adventurous," "rebellious," and "idealistic" are more applicable to the psychology graduate students than to the counseling students. It is not possible to isolate any cause or group of causes that would definitely account for these scoring differences but factors of age

PROFILE SHEET FOR THE California Psychological Inventory: FEMALE

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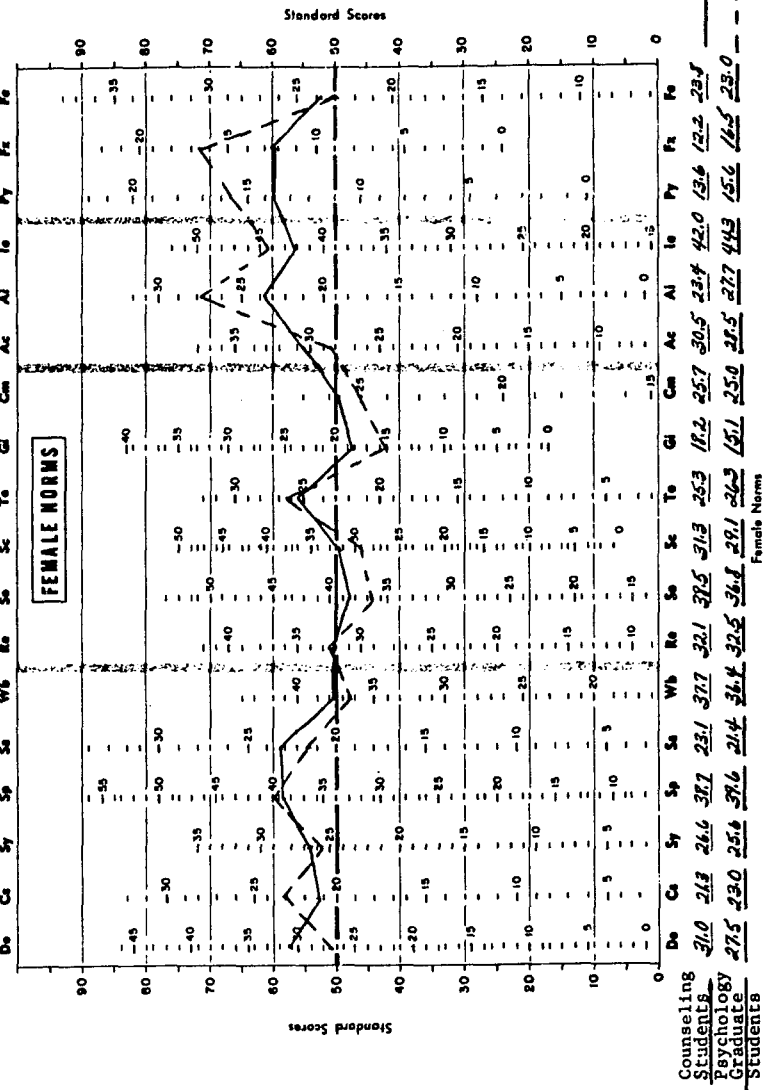


Fig. 9. Comparative profile configurations of female counseling students and female psychology graduate students.

and academic environment may be reasonable speculations. The comparisons of female counseling students to female college students and female psychology graduate students again support the contention that the normative data of female college students provides a better basis for comparison of female counseling students than does the data for female psychology graduate students.

In an effort to detect scoring differences between sexes, male and female profiles, according to t score values, are shown in Figure 10. The profiles tend to be essentially similar and scoring patterns according to class are identical. High scores are prevalent on Class I, Class III, and Class IV scales while Class II scores are, by comparison, low, yet still exceed the mean in most instances. Males score slightly higher than females on 11 of the 18 CPI scales (Do, Cs, Sy, Sp, Sa, Wb, So, Sc, Gi, Cm, and Ac) and score lower on 5 (To, Ai, Py, Fx, and Fe) while the remaining 2 show the scores (Re and Ie). None of these differences, however, is significant.

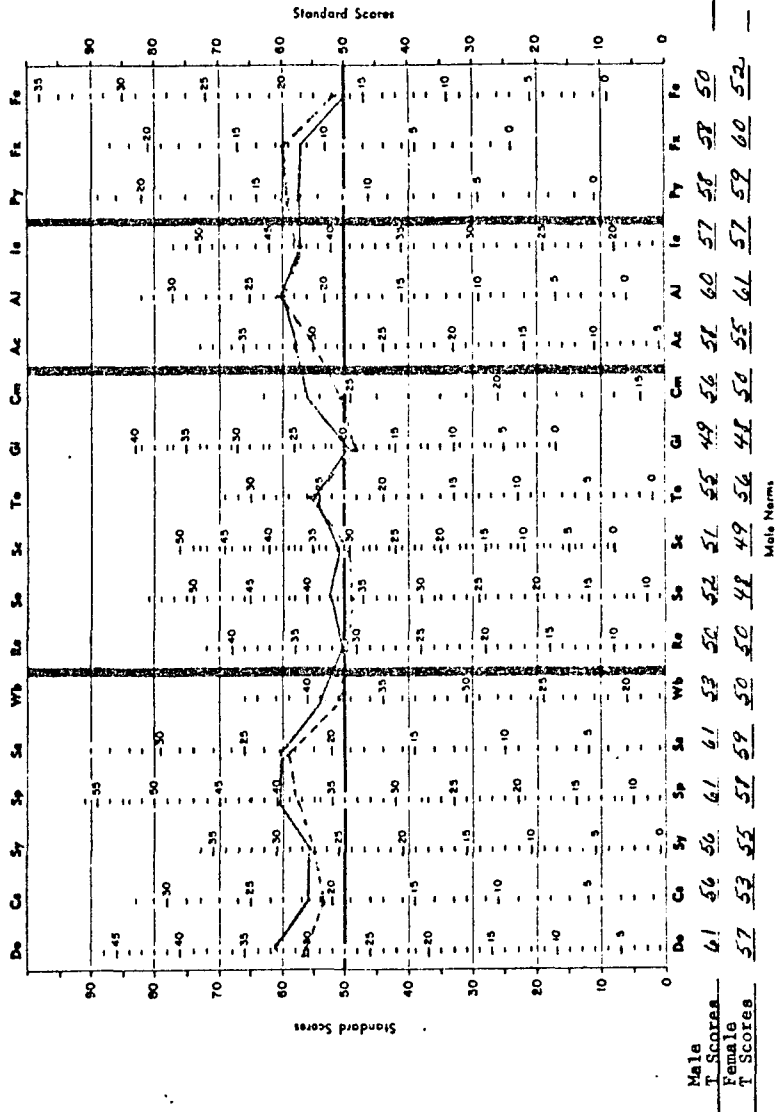
t test analysis. In an attempt to validate the CSS and determine its power as a discriminator between those nominated as most effective and least effective counselors, a series of t values were calculated. The data reported herein reveals the degree of significant difference between those validating subjects nominated as most effective versus least effective, most effective counseling students versus the two middle quartiles and those rated least effective versus the two middle quartiles on each of the CPI scales in addition to the CSS.

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Fig. 10. Comparative profile configurations based on t score values of male and female counseling students from validating group I.

Group means, standard deviations and t values of those counseling students nominated to the most effective and least effective quartiles are presented in Table 7. To attain a significant difference at the $p < .05$ level with 70 degrees of freedom, a t value of 2.00 is necessary; a t value of 2.66 is needed to reach the $p < .01$ level of significance and t must equal 3.460 so that the $p < .001$ level can be attained. Of the 18 scales on the CPI, 12 scales met or exceeded the $p < .05$ significance level. Of the 12, 4 scales (Wb, Sc, Gi, and Py) reached the $p < .05$ level of significance, 5 (Sy, Sp, Ac, Ai, and Fx) were significant at the $p < .01$ level and the remaining 3 (Cs, To, and Ie) were significant at $p < .001$. Despite the large number of scales which differentiate between these extreme groups, only one, Ie ($t = 5.44$), exceeds the discriminating power of the CSS ($t = 4.80$). These results indicate that, at least in the instance of those in the extreme groups of validating group I, a multitude of CPI scales are capable of differentiating between groups. A profile configuration of the most and least effective groups of counseling students shows, however, that in terms of t scores the differences are slight (Figure 11). Comparing the groups via profile configurations, it is evident that those rated most effective score consistently higher on all scales than their less effective counterparts.

The number of CPI scales differentiating successfully between groups was greatly reduced when subjects in the top quartile were compared to those in the middle quartiles. In this instance, t values of 1.98, 2.62, and 3.73, respectively, were needed to attain

Table 7

Means, Standard Deviations and t Values
 of Those Validating Group I Subjects
 Assigned to Most or Least
 Effective Groups

Variable	Mean	Standard deviation	t value
Do--Most	32.8	5.20	
Least	31.6	5.88	0.91
Cs--Most	22.7	2.28	
Least	19.9	3.73	3.77***
Sy--Most	28.5	3.93	
Least	25.2	5.33	2.97**
Sp--Most	41.0	4.45	
Least	37.1	6.77	2.86**
Sa--Most	24.0	2.56	
Least	23.3	3.85	0.83
Wb--Most	39.3	2.83	
Least	37.0	5.07	2.47*
Re--Most	32.8	3.99	
Least	31.2	4.99	1.54
So--Most	38.0	4.96	
Least	36.5	5.23	1.18
Sc--Most	32.1	4.39	

Table 7 (continued)

Variable	Mean	Standard	
		deviation	t value
Least	28.7	7.62	2.27*
To--Most	26.8	2.66	
Least	23.1	4.67	4.09***
Gi--Most	19.3	4.24	
Least	16.6	6.37	2.09*
Cm--Most	26.1	1.41	
Least	25.7	1.99	0.95
Ac--Most	31.9	2.74	
Least	29.1	4.70	3.00**
Ai--Most	24.3	3.20	
Least	21.8	3.74	2.94**
Ie--Most	44.2	2.86	
Least	39.3	4.56	5.44***
Py--Most	14.0	2.32	
Least	12.8	2.36	2.26*
Fx--Most	12.9	3.29	
Least	10.3	4.43	2.83**
Fe--Most	20.8	4.70	
Least	19.4	5.41	1.16
CSS--Most	24.3	2.33	

Table 7 (continued)

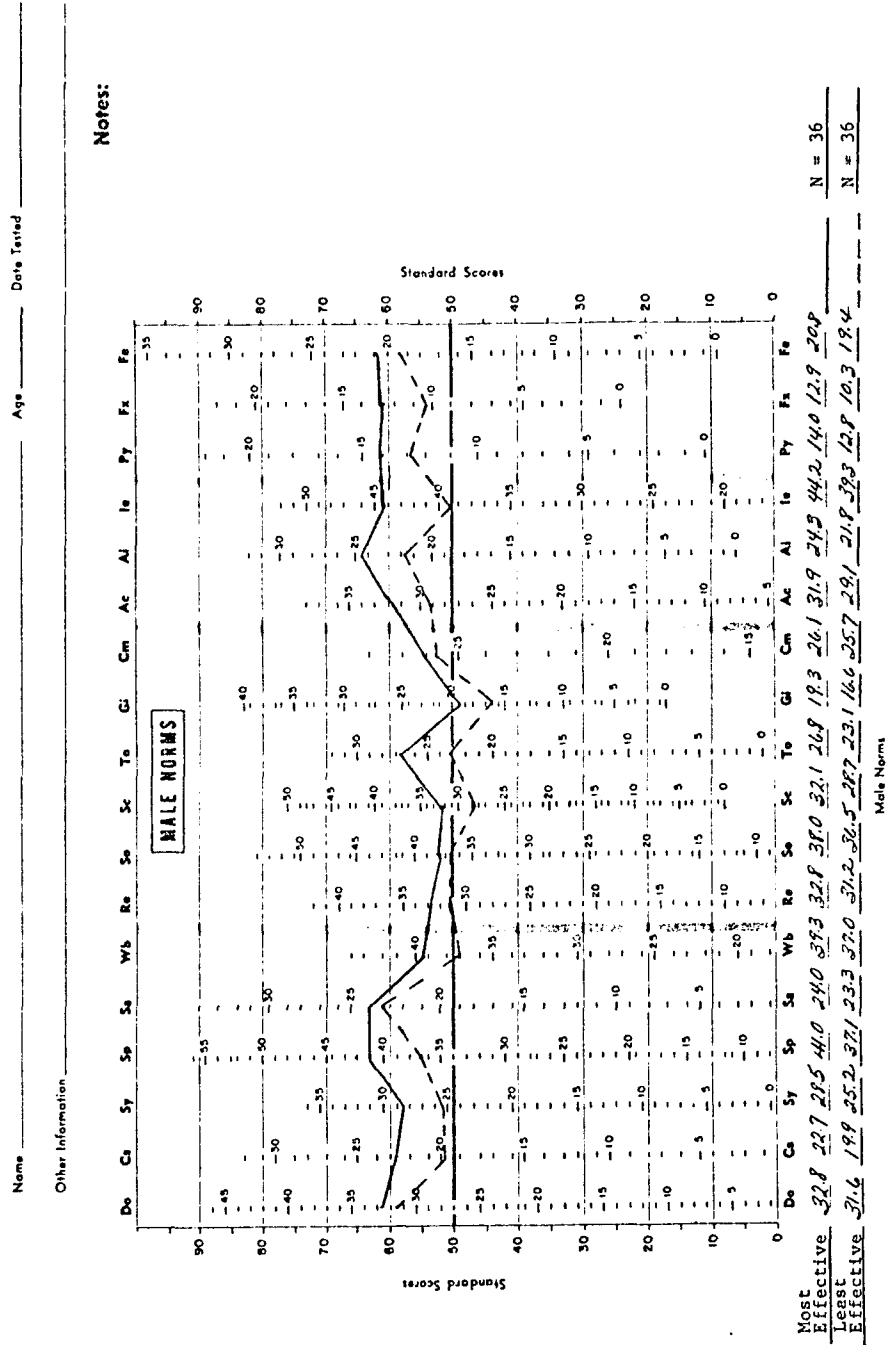
Variable	Mean	Standard	t value
		deviation	
Least	20.9	3.49	4.80***

* $p < .05$

** $p < .01$

*** $p < .001$

PROFILE SHEET FOR THE *California Psychological Inventory: MALE*



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Fig. 11. Comparative profile configurations of validating group I subjects nominated to either most effective or least effective quartiles.

the $p < .05$, $p < .01$, and $p < .001$ confidence levels with 110 degrees of freedom (Table 8). Of the published CPI scales, only the To ($p < .05$) and Ie ($p < .01$) scales continued to differentiate between the two groups. The strongest discriminator between the most effective quartile and the quartiles in middle ground was the CSS. The difference between means of the groups on this variable yielded a t value of 3.09 which is significant at the .01 level.

The CSS scale retains its discriminatory power when applied to a comparison of the middle quartiles and the lowest quartiles. Again, there are 110 degrees of freedom and t values of 1.98, 2.62, and 3.73 are necessary for the $p < .05$, $p < .01$, and $p < .001$ levels of significance. The CSS differentiates at the $p < .01$ level with a t of 2.69. The CSS is not alone in its ability to differentiate as 11 of the 18 published CPI scales also have this capability. The scales that discriminate between middle and low quartiles are almost identical to those which discriminate between the quartiles of subjects rated most or least effective (Table 9). Only one, the Wb scale, is not effective in this instance and yet it approaches significance ($t = 1.97$). The data indicates, then, that while 12 CPI scales can discriminate between the extreme quartiles and 11 have discriminatory power between the middle and lower quartiles, only 2 (To and Ie) discriminate between the upper and middle quartiles. Furthermore, neither of these two scales discriminate with the power of the CSS.

Table 8
Means, Standard Deviations and t Values
of Those Validating Group I Subjects
Assigned to the Most Effective and
Middle Quartiles

Variable	Mean	Standard	
		deviation	t value
Do--Most	32.8	5.20	
Middle	31.7	5.94	0.98
Cs--Most	22.7	2.28	
Middle	21.8	2.96	1.55
Sy--Most	28.5	3.93	
Middle	27.5	4.30	1.13
Sp--Most	41.0	4.45	
Middle	39.7	5.01	1.28
Sa--Most	24.0	2.56	
Middle	23.0	2.96	1.60
Wb--Most	39.3	2.83	
Middle	38.5	3.19	1.34
Re--Most	32.8	3.99	
Middle	31.3	4.18	1.88
So--Most	38.0	4.96	
Middle	39.4	4.34	-1.56
Sc--Most	32.1	4.39	

Table 8 (continued)

Variable	Mean	Standard	
		deviation	t value
Middle	32.1	6.51	-0.03
To--Most	26.8	2.66	
Middle	25.5	3.42	2.00*
Gi--Most	19.3	4.24	
Middle	19.4	5.93	-0.08
Cm--Most	26.1	1.41	
Middle	26.3	1.61	-0.69
Ac--Most	31.9	2.74	
Middle	30.9	3.47	1.43
Ai--Most	24.3	3.20	
Middle	23.0	3.45	1.89
Ie--Most	44.0	2.86	
Middle	13.2	3.70	2.62*
Py--Most	14.0	2.32	
Middle	13.2	2.63	1.64
Fx--Most	12.9	3.29	
Middle	12.0	3.87	1.14
Fe--Most	20.8	4.70	
Middle	19.8	4.85	0.96
CSS--Most	24.3	2.33	

Table 8 (continued)

Variable	Mean	Standard	t value
		deviation	
Middle	22.6	2.85	3.09**

* $p < .05$

** $p < .01$

Table 9
Means, Standard Deviations and t Values
of Those Validating Group I Subjects
Assigned to the Least Effective and
Middle Quartiles

Variable	Mean	Standard deviation	t value
Do--Least	31.6	5.88	
Middle	31.7	5.94	-0.05
Cs--Least	19.9	3.73	
Middle	21.8	2.96	-2.88**
Sy--Least	25.2	5.33	
Middle	27.5	4.30	-2.46*
Sp--Least	37.1	6.77	
Middle	39.7	5.01	-2.29*
Sa--Least	23.3	3.85	
Middle	23.0	2.96	0.43
Wb--Least	37.0	5.07	
Middle	38.5	3.19	-1.97
Re--Least	31.2	4.99	
Middle	31.3	4.18	-0.07
So--Least	36.5	5.23	
Middle	39.4	4.34	-3.03**
Sc--Least	28.7	7.62	

Table 9 (continued)

Variable	Mean	Standard	
		deviation	t value
Middle	32.1	6.51	-2.42*
To--Least	23.1	4.67	
Middle	25.5	3.42	-3.03**
Gi--Least	16.6	6.37	
Middle	19.4	5.93	-2.24*
Cm--Least	25.7	1.99	
Middle	26.3	1.61	-1.72
Ac--Least	29.1	4.70	
Middle	30.9	3.47	-2.25*
Ai--Least	21.8	3.74	
Middle	23.0	3.45	-1.57
Ie--Least	39.3	4.56	
Middle	42.4	3.70	-3.78***
Py--Least	12.8	2.36	
Middle	13.2	2.63	-0.78
Fx--Least	10.3	4.43	
Middle	12.0	3.87	-2.14*
Fe--Least	19.4	5.41	
Middle	19.8	4.85	-0.44
CSS--Least	20.9	3.49	

Table 9 (continued)

Variable	Mean	Standard	t value
		deviation	
Middle	22.6	2.85	-2.69**

* $p < .05$

** $p < .01$

*** $p < .001$

Validating Group II Score

Analysis

The 56 subjects who comprise validating group II are drawn from the counseling student population of ODU. As has been the case with the criterion group and validating group, both sexes are represented making profile configuration comparisons on the basis of sex necessary. The 25 males of the sample are compared to the normative data for male college students and male psychology graduate students while the 31 females are similarly compared to female college and psychology graduate students.

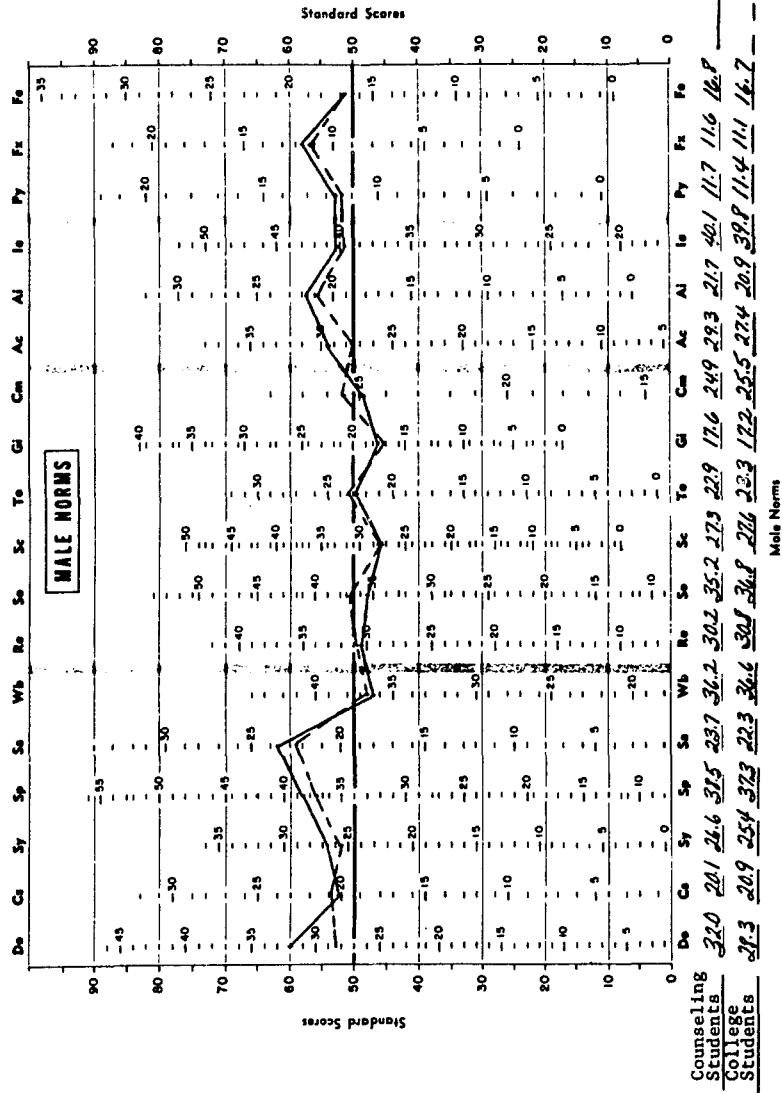
CPI profile analysis. In looking at the comparative configuration profiles of males from validating group II and male college students, it is evident that the two groups are quite similar as measured by the CPI (Figure 12). In this instance, counseling students score higher than college students on 12 of the 18 CPI scoring categories. The male counseling students are more elevated on the Do, Sy, Sp, Sa, To, Gi, Ac, Ai, Ie, Py, Fx, and Fe scales while male college students tended to score higher on Cs, Wb, Re, So, Sc, and Cm measures. With one exception, however, none of the scoring differences exceeds three t score points. The greatest scoring difference was on the Do scale where a t score difference of seven points exists. The similarity of these two groups reflects the similarity that was found between male subjects from the criterion group and validating group I and male college students.

The consistency with which male counselors reflect the profile configuration of male college students is further emphasized when

PROFILE SHEET FOR THE *California Psychological Inventory: MALE*

Name _____ Age _____ Date Tested _____
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Fig. 12. Comparative profile configurations of male counseling students from validating group II and male college students.

comparing scores from the four classes of personality variables. As was true with the males from the criterion group and validating group I, males from validating group II score well above the mean on Class I variables of poise, ascendancy, and self-assurance, at or below the mean on Class II measures of socialization and responsibility, are above average on measures of achievement potential and intellectual efficiency (Class III), and also are above the mean in measures of intellect and interest modes (Class IV). The elevated scores (plus one standard deviation) on the Do and Sa scores and relatively high scores on the Ai and Fx scales yield adjective descriptions of "aggressive," "confident," "persuasive," "intelligent," "out-spoken," "mature," "insightful," and "idealistic" for the male counseling students of validating group II.

Summarily, the male counseling student is elevated over male college students on 12 of the 18 CPI scales. The differences in scoring, however, are slight and not significant. Inasmuch as individual scale scores reveal little difference, there is little difference in scoring patterns on class measures. The male counseling student is elevated over male college students on Classes I, III, and IV while the male college student is elevated on Class II scales.

In comparing male psychology graduate students to male counseling students in validating group II, it is apparent that instead of being elevated in their scoring pattern, male counseling students most often score lower. In fact, the male counseling students from validating group II score lower than male psychology graduate students on 12 of the 18 CPI scoring categories. The male psychology

graduate students are elevated on scales measuring Cs, Sp, Wb, Re, Sc, To, Cm, Ai, Ie, Py, Fx, and Fe. As two scores--Ac and Sa--the male counseling students are elevated on only four scales--Do, So, Gi, and Sy. Significant differences of 10 t score points are the Cs, To, Ai, Ie, Py, and Fx scales. Male psychology graduate students score higher on all of these scales and are consequently described as being more "active," "ambitious," "clever," "enterprising," "tolerant," "dominant," "forceful," "efficient," "spontaneous," and "confident" than their counseling student counterparts.

Both of the groups in the comparison tend to follow the same trends in scoring as determined by classes. Again, Class II measures of socialization, maturity, and responsibility show relatively low scores while relatively high scores for both groups are found on Class I, III, and IV measures. In looking back at the comparative profile configuration of male counseling students and male college students (Figure 12) and comparing the profiles with those of male counseling students and male psychology graduate students (Figure 13), it is once again apparent that until sufficient data on counselors is available, the normative data on male college students provides a better basis for counselor comparison than does the data on male psychology students.

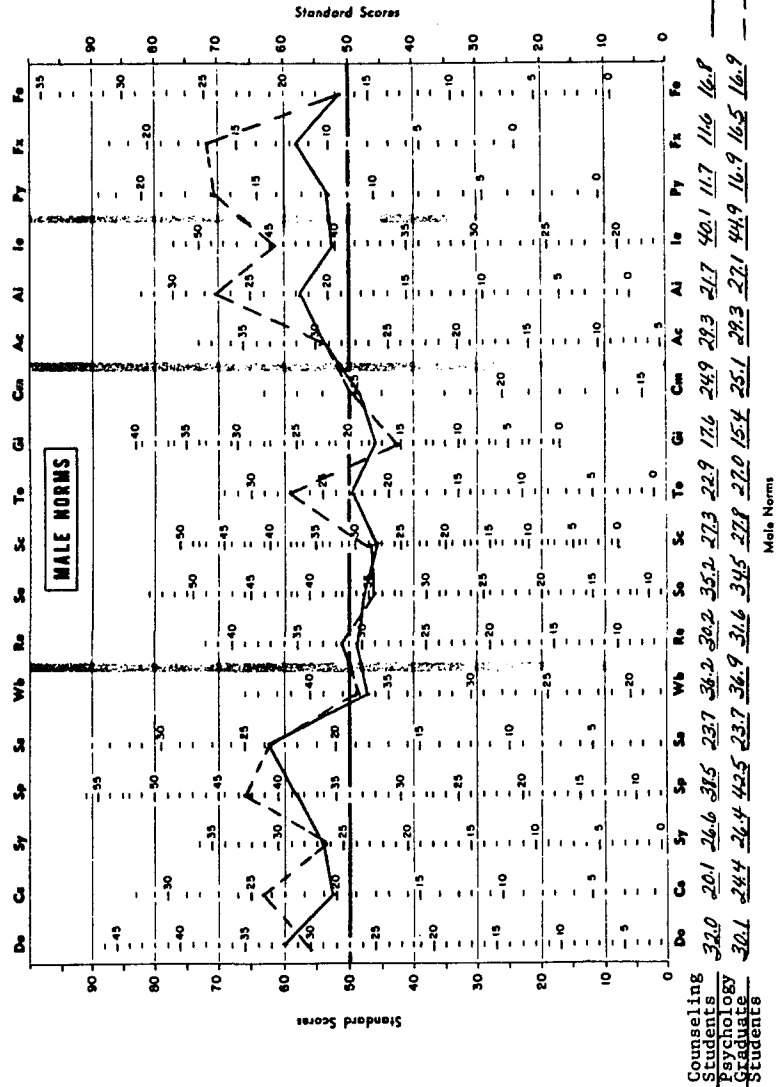
When comparing the profile configurations of female counseling students from validating group II and female college students, the investigation again discovered a large number of similarities (Figure 14). High scores were equally divided between the two groups. Female counseling students were elevated on the Do, Sy, Sp, Sa, Cm,

PROFILE SHEET FOR THE California Psychological Inventory: MALE

Name _____ Age _____ Date Tested _____

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Fig. 13. Comparative profile configurations of male counseling students from validating group II and male psychology graduate students.

Age _____ Date Tested _____

Age _____ Date Tested _____

Notes:



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counseling students from validating group II and female college students.

Ac, Ai, Py, and Fe scales but scored lower than the group of female college students on the Cs, Wb, Re, So, Sc, To, Gi, Ie, and Fx measures. In that the greatest t score differential was eight points, little significance can be ascribed to the scoring differences.

Despite the equality of high scores for both groups, female counseling students appear to be generally elevated in three of four scoring classes. Female counseling students are above average in Class I variables--poise, ascendancy, and self-assurance; Class III variables--achievement, potential, and intellectual efficiency; and Class IV variables--measures of intellectual and interest modes. The scores of female counseling students on Class II measures--measures of socialization, maturity, and responsibility--are, however, below average and counseling students are surpassed on all but one of these measures, Cm, by female college students.

In summary, female counseling students in validating group II are quite similar to female college students. Their respective normative t scores are more than three points apart on only two occasions, the Sa and So scales. Female counseling students were also found to be slightly elevated on Class I, Class III, and Class IV measures while their Class II scores were slightly below average. Although none of their scores were a standard deviation from the mean, they scored above average on Do, Sp, Sa, and Ai scales and below average on the So and Gi scales indicating that they tend to be "confident," "clever," "talkative," "aggressive," "dominant," and "demanding." By the same token, they could also be seen as "defensive," "opinionated," "rebellious," "cautious," and "aloof."

Comparison of the same group of female counseling students to female psychology graduate students revealed a number of profound scoring differences on the CPI scales (Figure 15). The female psychology graduate students were elevated on the Cs, Sp, Re, So, Sc, To, Ai, Ie, Py, and Fx scales for a total of 10 of the 18 scales. Despite the elevated scoring patterns of the female psychology graduate students on these scales, only four attain the significance of 10 t score points difference. Female psychology students are significantly higher on Ai, Ie, Py, and Fx measures and, thus, are perceived as being more "forceful," "strong," "efficient," "capable," "observant," "resourceful," and "idealistic" than those in the female counseling student group. Inasmuch as all of the measures which yield significantly different normative scores are from Class III and Class IV clusters, these measures of achievement potential and intellectual efficiency (Class III) and of intellectual and interest modes (Class IV) account for the significant differences in class scores.

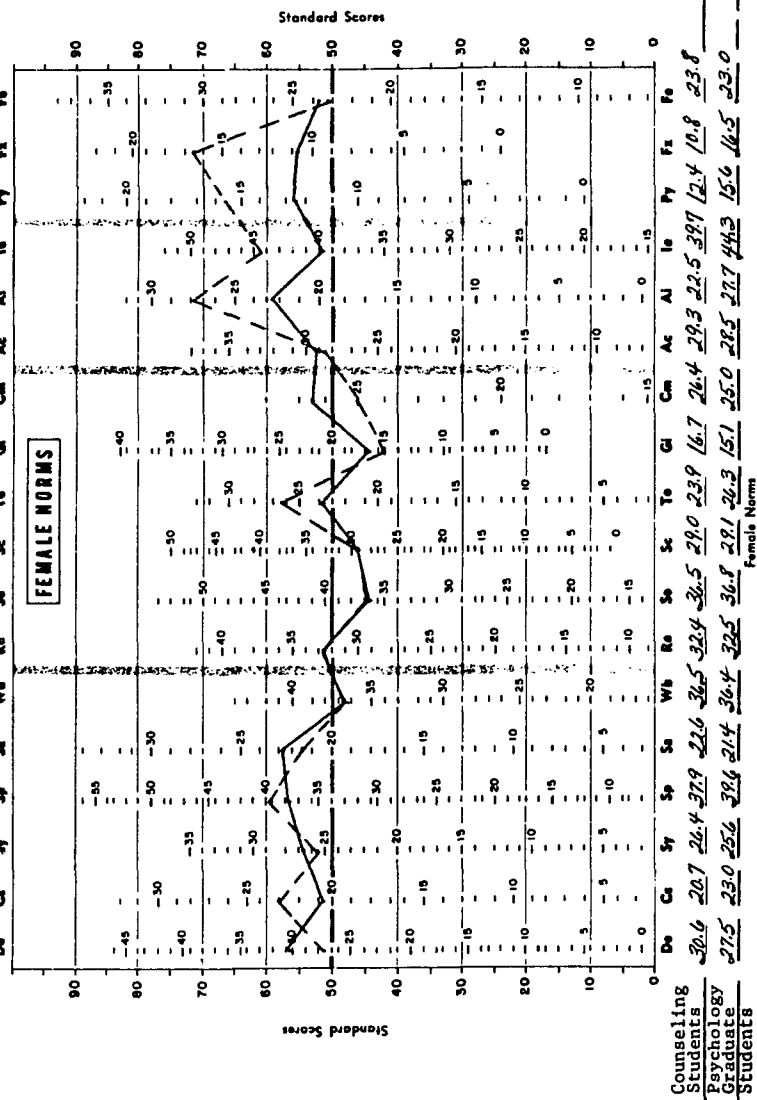
In summary, it was found that female counseling students, like their male counterparts, most closely and consistently approximate the mean of female college students as opposed to the mean of female psychology graduate students. This fact should be considered in any attempt to compare a female counseling student's individual profile to that normative group considered most appropriate.

A final comparison of profile configurations from validating group II is made on the basis of t scores of male and female subjects (Figure 16). Males are slightly elevated on the Do, Sp, Sa, So, Gi, and Fx scales while females are elevated on Wb, Re, Sc, To, Cm, Ai,

PROFILE SHEET FOR THE *California Psychological Inventory: FEMALE*

Name _____ Age _____ Date Tested _____
 Other Information _____

Notes:



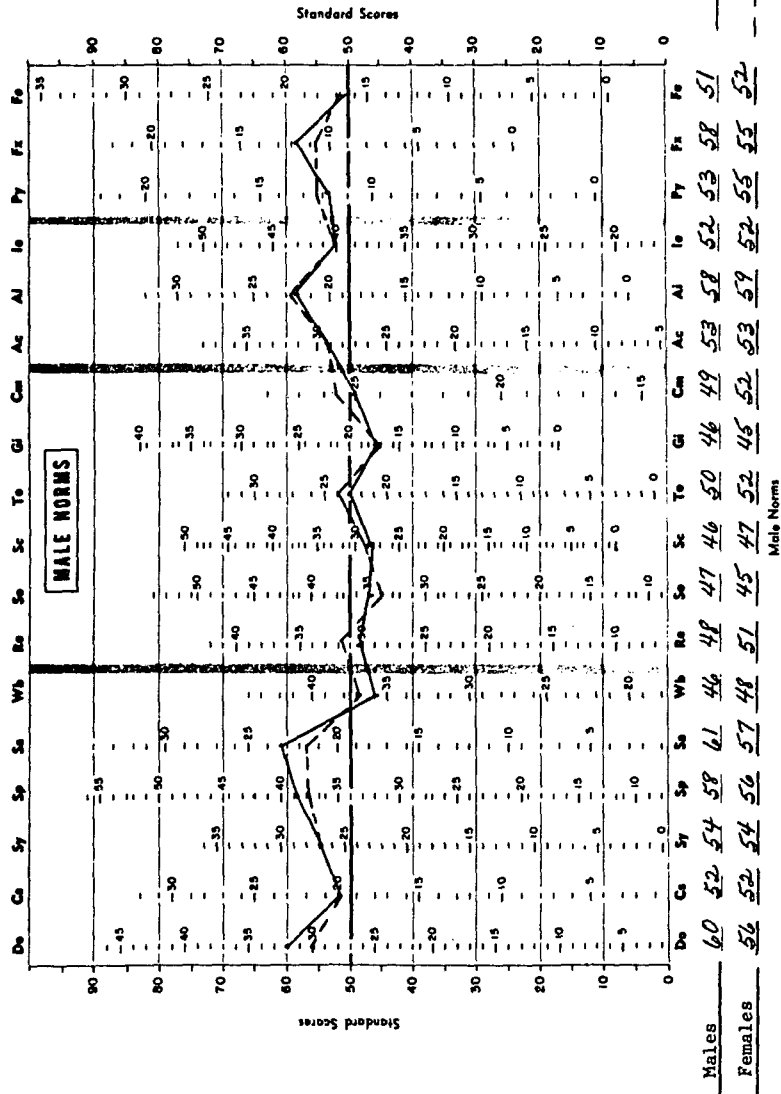
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Fig. 15. Comparative profile configurations of female counseling students from validating group II and female psychology graduate students.

PROFILE SHEET FOR THE *California Psychological Inventory: MALE*

Name _____ Age _____ Date Tested _____
 Other Information _____

Notes:



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Fig. 16. Comparative profile configurations of male and female counseling students from validating group II as based on t score results.

Py, and Fe measures. Four scales yield identical t scores for both sexes (Cs, Sy, Ac, and Ie). On those scales where a scoring difference exists, there is none with a significant degree of difference. These results indicate that there is no real difference in the scoring patterns of male and female counseling students on the personality variables of the CPI.

t test analysis. In validating group II, as in the criterion group and validating group I, a series of t tests were computed to determine the discriminating ability of CSS as well as the published scales from the CPI. Computations were made between those counseling students rated as most effective versus those rated least effective, those rated as most effective and those from the middle quartiles, and, finally, between those in the middle quartiles and students rated as being least effective.

In the current sample, 14 students were rated most effective and 14 students were classified as least effective. Thus, with 26 degrees of freedom, a t value of 2.06 was necessary to discriminate at the $p < .05$ level. A t value of 2.78 was needed to attain the $p < .01$ level and a t value of 3.707 was required to discriminate at the $p < .001$ level. Table 10 reveals that in the current sample three of the CPI scales are satisfactory discriminators. The Cs scale ($t = 3.26$) was found to discriminate at the $p < .01$ level and was the strongest discriminator. The Gi scale ($t = 2.59$) was significant at the $p < .02$ level and the To scale ($t = 2.28$) met the requirement for significance at the $p < .05$ level. The CSS was found to have a t value of 2.61 and discriminated at the $p < .02$

Table 10

Means, Standard Deviations and t Values
of Those Validating Group II Subjects
Assigned to the Most or Least
Effective Groups

Variable	Mean	Standard	
		deviation	t value
Do--Most	34.2	6.53	1.71
Least	29.8	6.98	
Cs--Most	22.5	3.54	3.26***
Least	17.6	4.30	
Sy--Most	27.0	5.84	0.47
Least	26.1	3.50	
Sp--Most	39.7	5.46	1.57
Least	36.4	5.58	
Sa--Most	23.6	4.70	0.42
Least	23.0	3.25	
Wb--Most	36.9	3.22	1.42
Least	33.9	7.20	
Re--Most	32.1	2.74	1.33
Least	30.4	3.97	
So--Most	36.1	4.38	0.45
Least	35.0	7.76	
Sc--Most	28.5	6.93	0.58

Table 10 (continued)

Variable	Mean	Standard	
		deviation	t value
Least	26.9	7.89	
To--Most	24.6	3.71	2.28*
Least	20.7	5.13	
Gi--Most	19.7	4.28	2.59**
Least	15.1	5.17	
Cm--Most	26.2	1.25	0.26
Least	25.8	4.95	
Ac--Most	30.7	3.49	1.54
Least	28.6	3.62	
Ai--Most	22.6	2.87	1.59
Least	20.8	3.06	
Ie--Most	41.2	4.85	1.74
Least	38.1	4.72	
Py--Most	12.8	2.74	1.83
Least	11.0	2.63	
Fx--Most	11.1	3.69	0.98
Least	9.9	2.81	
Fe--Most	19.7	5.23	-0.68
Least	21.1	5.81	
CSS--Most	23.2	3.14	2.61**

Table 10 (continued)

Variable	Mean	Standard deviation	t value
Least	20.7	1.71	

* $p < .05$

** $p < .01$

*** $p < .001$

level of significance. In this instance, the CSS was second only to the Cs scale in its ability to differentiate between the two groups.

The t values yielded in a comparison of the group means of the most effective group as opposed to the two middle quartiles are presented in Table 11. An examination of these values shows that neither the published CPI scales nor the CSS attained the necessary t value ($t = 2.021$ with 40 degrees of freedom) to successfully differentiate between these groups. Further investigation, however, reveals that the Do scale and the CSS are the strongest indicators and do discriminate between the two groups at the $p < .10$ level.

A similar analysis of the mean scores of students placed in the middle quartiles and the mean scores of those judged to be least effective yields only two successful discriminators at varying levels of significance (Table 12). In this sample, where there are 40 degrees of freedom, t values of 2.021, 2.704, and 3.551 are necessary to attain the $p < .05$, $p < .01$, and $p < .001$ significance levels, respectively. Two of the published CPI scales attain significance under these conditions. The Cs scale ($t = 2.70$) is significant at the $p < .01$ level while the To scale ($t = 2.30$) is significant at the $p < .05$ level. The CSS fails to discriminate between those in these two groups.

Summary

Chapter 4 contains the analysis of all data collected in the study. The initial data, that collected from the criterion group of 130 practicing school counselors, was first used in item analysis. To facilitate item analysis, counselors were divided into quartiles on

Table 11
Means, Standard Deviations and t Values
of Those Validating Group II Subjects
Assigned to the Most Effective and
Middle Quartiles

Variable	Mean	Standard	
		deviation	t value
Do--Most	34.2	6.53	1.92
Middle	30.4	5.68	
Cs--Most	22.5	3.54	1.39
Middle	20.9	3.39	
Sy--Most	27.0	5.84	0.33
Middle	26.4	5.09	
Sp--Most	39.7	5.46	0.65
Middle	38.3	6.96	
Sa--Most	23.6	4.70	0.54
Middle	22.9	3.67	
Wb--Most	36.9	3.22	-0.29
Middle	37.3	4.48	
Re--Most	32.1	2.74	0.46
Middle	31.5	4.22	
So--Most	36.1	4.38	-0.12
Middle	36.3	4.62	
Sc--Most	28.5	6.93	-0.12

Table 11 (continued)

Variable	Mean	Standard	
		deviation	t value
Least	28.8	7.08	
To--Most	24.6	3.71	0.29
Least	24.2	4.33	
Gi--Most	19.7	4.28	1.62
Least	16.8	6.04	
Cm--Most	26.2	1.25	0.92
Least	25.5	2.75	
Ac--Most	30.7	3.49	1.48
Least	29.0	3.45	
Ai--Most	22.6	2.87	0.04
Least	22.6	3.04	
Ie--Most	41.2	4.85	0.86
Least	40.0	4.06	
Py--Most	12.8	2.74	0.55
Least	12.3	2.81	
Fx--Most	11.1	3.69	-0.53
Least	11.8	3.98	
Fe--Most	19.7	5.23	-0.89
Least	21.0	4.17	
CSS--Most	23.2	3.14	1.71
Least	21.5	3.02	

Table 12

Means, Standard Deviations and t Values
 of Those Validating Group II Subjects
 Assigned to the Least Effective and
 Middle Quartiles

Variable	Mean	Standard	
		deviation	t value
Do--Least	29.8	6.98	
Middle	30.4	5.68	0.30
Cs--Least	17.6	4.30	
Middle	20.9	3.39	2.70***
Sy--Least	26.1	3.50	
Middle	26.4	5.09	0.19
Sp--Least	36.4	5.58	
Middle	38.3	6.96	0.88
Sa--Least	23.0	3.25	
Middle	22.9	3.67	-0.06
Wb--Least	33.9	7.20	
Middle	37.3	4.48	1.88
Re--Least	30.4	3.97	
Middle	31.5	4.22	0.84
So--Least	35.0	7.76	
Middle	36.3	4.62	0.65
Sc--Least	26.9	7.89	

Table 12 (continued)

Variable	Mean	Standard	
		deviation	t value
Middle	28.8	7.08	0.80
To--Least	20.7	5.13	
Middle	24.2	4.33	2.30**
Gi--Least	15.1	5.17	
Middle	16.8	6.04	0.91
Cm--Least	25.8	4.95	
Middle	25.5	2.75	-0.30
Ac--Least	28.6	3.62	
Middle	29.0	3.45	0.34
Ai--Least	20.8	3.06	
Middle	22.6	3.04	1.75
Ie--Least	38.1	4.72	
Middle	40.0	4.06	1.37
Py--Least	11.0	2.63	
Middle	12.3	2.81	1.50
Fx--Least	9.9	2.81	
Middle	11.8	3.98	1.59
Fe--Least	21.1	5.81	
Middle	21.0	4.17	-0.07
CSS--Least	20.7	1.71	

Table 12 (continued)

Variable	Mean	Standard	t value
		deviation	
Middle	21.5	3.02	0.90

**p < .01

***p < .001

the basis of their rated effectiveness in counseling situations in accordance with the Truax Scales of Empathy, Positive Regard, and Self-Congruence (Truax, 1961, 1962a, 1962b). The responses of those rated most effective were compared to those who were rated least effective by using a chi square test. Those items that were found to discriminate at $p < .10$ were retained for the CSS. As expected, the CSS discriminated between the extremes of the criterion group. The CSS was later found to discriminate between those nominated to the extremes of both validating group I ($p < .001$) and validating group II ($p < .02$). The CSS was also found to discriminate between the upper and middle quartiles of the criterion group ($p < .001$), the middle and lower quartiles of the criterion group ($p < .001$), the upper and middle quartiles of validating group I ($p < .01$), the middle and lower quartiles of validating group I ($p < .01$), and significance is approached ($p < .095$) between the upper quartile and middle quartiles of validating group II. Means and standard deviations for all groups on the CSS scale are presented in Table 13. In addition to the CSS, a number of the published CPI scales discriminated between various groups and are reported in Tables 2 through 12.

Analysis of profiles of males and females of the criterion group were made to like-sexed groups of college students and psychology graduate students. Practicing counselors (criterion group) and both validating groups (counseling students) consistently approximated the mean of like-sexed college students as opposed to like-sexed psychology graduate students. Such evidence leads to

Table 13
Means and Standard Deviations of the
CSS--All Groups

		Standard devia- tion	
Group		Mean	
Criterion			
Most Effective	N=32	24.6	2.60
Middle Quartiles	N=71	21.2	2.90
Least Effective	N=27	18.0	3.95
Total	N=130	21.4	3.82
Validating I			
Most Effective	N=36	24.3	2.33
Middle Quartiles	N=76	22.6	2.85
Least Effective	N=36	20.9	3.49
Total	N=148	19.9	4.94
Validating II			
Most Effective	N=14	23.2	3.14
Middle Quartiles	N=28	21.5	3.02
Least Effective	N=14	20.7	1.71
Total	N=56	21.8	2.62
Sex			
Males	N=136	21.8	3.44
Females	N=198	22.1	3.40

Table 13 (continued)

Group		Standard	
		Mean	devia- tion
Total Population	N=334	22.0	3.41

supporting college students as the most proper normative group for individuals seeking training as counselors. It should be noted, however, that when the most and least effective counselors and/or counseling students are profiled separately, the norms of the most effective groups take on many of the characteristics associated with psychology graduate students. Generally, though, those in or aspiring to the counseling profession follow a similar scoring pattern to like-sexed college students but average a few t score points higher.

Finally, in an attempt to determine the interrelationship between the CSS and the published scales of the CPI, a 19 x 19 correlation matrix was developed for both sexes (Appendix C). That portion of these two matrices that relates directly to the CSS is presented in Tables 14 (males) and 15 (females). Although a significant relationship exists ($p < .001$) between the CSS and 12 of the published CPI scales for men and 11 of the published CPI scales for women, these findings shed little light on the value of the CSS as a measure of a totally independent variable. The highest correlation in either of the tables is a correlation of .53 between Ie and CSS. Thus, only 27.5% of commodity exists between these scales.

Table 14
 Intercorrelation of the Published CPI
 Scales to the CSS--Males

Variable	Pearson's correlation	Signifi- cance level
Do to CSS	.3541	.001
Cs to CSS	.4471	.001
Sy to CSS	.3458	.001
Sp to CSS	.4875	.001
Sa to CSS	.2816	.001
Wb to CSS	.3060	.001
Re to CSS	.1394	.053
So to CSS	.0301	.364
Sc to CSS	.0239	.391
To to CSS	.5089	.001
Gi to CSS	.0901	.149
Cm to CSS	.0287	.370
Ac to CSS	.2956	.001
Ai to CSS	.4408	.001
Ie to CSS	.5332	.001
Py to CSS	.3604	.001
Fx to CSS	.4248	.001
Fe to CSS	-0.1172	.087

Table 15

Intercorrelation of the Published CPI
Scales to the CSS--Females

Variable	Pearson's correlation	Signifi- cance level
Do to CSS	.3523	.001
Cs to CSS	.4057	.001
Sy to CSS	.4573	.001
Sp to CSS	.4256	.001
Sa to CSS	.2654	.001
Wb to CSS	.3416	.001
Re to CSS	.1824	.005
So to CSS	.0134	.426
Sc to CSS	.0744	.149
To to CSS	.4639	.001
Gi to CSS	.1486	.018
Cm to CSS	.0178	.402
Ac to CSS	.4042	.001
Ai to CSS	.3830	.001
Ie to CSS	.5186	.001
Py to CSS	.3808	.001
Fx to CSS	.3928	.001
Fe to CSS	.0072	.460

Chapter 5

Summary, Conclusions and Recommendations

Chapter 5 includes a summary of the study including findings from item analysis and the analysis of the published CPI scales in addition to the CSS. Also included are limitations of the research, conclusions drawn from the study, and recommendations for further research.

Summary

The purpose of this study was to develop a scale for use in the counselor selection process by conducting an item analysis of the CPI. To facilitate scale development in this manner, it was necessary to develop two groups representing the extremes of counseling effectiveness. Consequently, groups of most effective and least effective counselors were developed by supervisors' nominations. Nominations were made on the basis of definitions of most and least effective counselors which were developed from the Truax scales (Truax, 1961, 1962a, 1962b). The criterion group of 130 practicing school counselors was, as a result, divided into quartiles with 32 nominated as most effective, 27 as least effective, while 71 were assigned to the middle quartiles. An item analysis comparing the responses of the two extreme groups was conducted on each of the 480 CPI items utilizing a series of chi square tests.

The major finding relative to item analysis was the identification of 32 CPI items that discriminated between counselors at better than the $p < .10$ level with 15 of these reaching better than the

$p < .05$ level of significance. These 32 items were incorporated in the CSS which was found to discriminate between extremes of the criterion group in excess of the $p < .001$ level of significance. The same level of significant discrimination was attained in applying the CSS in comparisons of top and middle quartiles and to middle and low quartiles of the criterion group as determined by supervisors' nominations.

The CSS was also found to be a successful discriminator between subjects nominated to extreme groups of most and least effective counseling students in two separate validating populations (validating group I and validating group II). The t scores obtained in each of these instances exceeded the requirements for discrimination at the $p < .02$ level of significance. The CSS was also found to discriminate between the upper and middle quartiles of validating group I ($p < .01$) and the middle and lower quartiles of validating group I. Further, the CSS approached significance when applied to the upper and middle quartiles of validating group II ($p < .095$). It was not, however, the only discriminating variable between groups. Several of the published scales from the CPI were also found to have discriminating potential in various comparisons.

Comparisons were also made on the basis of profile configuration on the 18 published CPI scales. In each instance, male and female counselors or counseling students were compared with like-sexed college students and psychology graduate students. The results of such comparisons were relatively consistent for both sexes across the criterion group and both validating groups. In each of these

instances counselors or counseling students very closely approximated the mean profile of like-sexed college students. For the most part, the t scores of counselors or counseling students were elevated slightly above the like-sexed college students but to an insignificant degree. This evidence supports using college students as a comparison group as the profiles of like-sexed psychology graduate students vary significantly and frequently from the counseling population.

In addition to these comparisons, male and females from each of the three groups were compared on the basis of t scores. Males and females in each case were found to be very similar in profile configuration. The scores for males and females on the CSS were likewise examined and are nearly identical.

Conclusions and Recommendations

The findings of this research indicate that it is possible to isolate an identifiable personality variable that is closely associated with supervisor rankings of counselors. Further, in those samples studied, the CSS was able to differentiate at a significant level between counseling students rated to extremes of most and least effective in counseling relationships. Such findings imply that the CSS has potential for use in the selection of candidates for counselor training.

The potential use of the CSS may, however, be limited at the present time. Initially, caution in the use of the CSS in isolation from other data should be emphasized. At best it should be perceived as one in a series of variables to be considered. Secondly, the

nominating procedure utilized to develop most and least effective subjects in all groups need strengthening and is seen as the greatest weakness in the study.

In order to improve upon the predictive strength of the scale, it is recommended that the Truax scales (Truax, 1961, 1962a, 1962b) be applied to actual taped interviews so that high scorers on these scales may be compared to low scorers. Secondly, in that several CPI scales also have discriminatory power between most and least effective groups, it is suggested that a regression equation be developed utilizing the CSS and the discriminating published scales from the CPI to develop a stronger measure of counseling potential. At present it would appear that additional research is needed to develop such a measure.

Appendices

Appendix A
California Psychological Inventory
Scale Purposes

Class I--Measures of Poise,

Ascendancy, and Self-

Assurance

Do (Dominance). To assess factors of leadership ability, dominance, persistence, and social initiative.

Cs (Capacity for status). To serve as an index of an individual's capacity for status (not his actual or achieved status). The scale attempts to measure the personal qualities and attributes which underlie and lead to status.

Sy (Sociability). To identify persons of outgoing, sociable, participative temperament.

Sp (Social presence). To assess factors such as poise, spontaneity, and self-confidence in personal and social interaction.

Sa (Self-acceptance). To assess factors such as sense of personal worth, self-acceptance, and capacity for independent thinking and action.

Wb (Sense of well-being). To identify persons who minimize their worries and complaints, and who are relatively free from self-doubt and disillusionment.

Class II--Measures of

Socialization, Maturity,

and Responsibility

Re (Responsibility). To identify persons of conscientious, responsible, and dependable disposition and temperament.

So (Socialization). To indicate the degree of social maturity, integrity, and rectitude which the individual has attained.

Sc (Self-control). To assess the degree and adequacy of self-regulation and self-control and freedom from impulsivity and self-centeredness.

To (Tolerance). To identify persons with permissive, accepting, and nonjudgmental social beliefs and attitudes.

Gi (Good impression). To identify persons capable of creating a favorable impression, and who are concerned about how others react to them.

Cm (Communality). To indicate the degree to which an individual's reactions and responses correspond to the modal ("common") pattern established for the inventory.

Class III--Measures of

Achievement Potential

and Intellectual Efficiency

Ac (Achievement via conformance). To identify those factors of interest and motivation which facilitate achievement in any setting where conformance is a positive behavior.

Ai (Achievement via independence). To identify those factors of interest and motivation which facilitate achievement in any

setting where autonomy and independence are positive behaviors.

Ie (Intellectual efficiency). To indicate the degree of personal and intellectual efficiency which the individual has attained.

Class IV--Measures of

Intellectual and

Interest Modes

Py (Psychological-mindedness). To measure the degree to which the individual is interested in, and responsive to, the inner needs, motives, and experiences of others.

Fx (Flexibility). To indicate the degree of flexibility and adaptability of a person's thinking and social behavior.

Fe (Femininity). To assess the masculinity or femininity of interests. (High scores indicate more feminine interests, low scores more masculine.)

Appendix B

Instructions for Raters

You are being asked to participate in a research project which, through the empirical approach to scale development, is attempting to develop a Counselor Selection Scale for use in objective assessment of nonintellective personality variables in prospective counselors. To facilitate the development of such a scale it is necessary to obtain two groups of nominees: a group rated as "most effective" and a group considered as "least effective." For the purposes of this study, descriptions of the "most" and "least" effective counselors have been developed from C. B. Truax's definitions of Empathy, Positive Regard and Self-Congruence. Rogerian in nature, these qualities have been shown to enhance counseling success in various styles of counseling.

To reduce the amount of labor in an already difficult task you are asked to rate only the 25% whom you feel are "most effective" and the 25% whom you feel are "least effective" using the descriptions below. After considering each of your counselors (and/or students as the case may be) please place a Roman Numeral I adjacent to their name or number if they are among the 25% who are "most effective" and a Roman Numeral II adjacent to their name or number if they are among the 25% who are "least effective."

It is requested that the names of the nominees and their rating be sent directly to Dr. Fred L. Adair, School of Education, College of William and Mary, Williamsburg, Virginia 23185. In doing this, it ensures that only he will have privilege to any information that

would associate names and ratings. These steps are taken to ensure the confidentiality of the data and protection of those participating.

For additional protection of those who are to be rated and yourself, it is requested that you not discuss the process with them or with your faculty or staff colleagues. Thank you very much for your cooperation.

Descriptions:

- I. Most Effective Counselors. Research tends to indicate that those counselors who are thought to be most effective exhibit a greater degree of Empathy, Positive Regard and Self-Congruence. In their relationships with their clients they are responsive to their clients' feelings and attend to their emotional state. The effective counselor is less restricted in the counseling relationship and is open to new experiences, feelings and thoughts. As a result of this openness, he is flexible enough to maintain a positive regard for those whose opinions differ from his. The respect for the client that is inherently a part of positive regard ensures the client's freedom of choice without reprisal from the counselor.
- II. Least Effective Counselor. The antithesis of the "most effective" counselor, this type of counselor exhibits a lesser degree of Empathy, Positive Regard and Self-Congruence. In their relationship with their client they seem to be completely unaware of even the most conspicuous of the client's feelings. His responses are not appropriate to the client's mood and there is no determinable quality of empathy. He is often defensive and ill at ease in his

relationships. The "least effective" counselor is restricted in his reactions and is rigid. This rigidity leads to his actively approving or disapproving of the client's actions or thoughts and results in client manipulation.

Appendix C

Male and Female Intercorrelation Matrices of the CSS and the Published CPI Scales

Table 16

Scale Intercorrelation Matrix for the
California Psychological Inventory
and the Counselor Selection

Scale--Males

	Do	Cs	Sy	Sp	Sa	Wb	Re	So	Sc	To	Gi	Cm	Ac	Ai	Ie	Py	Fx	Fe	CSS
Do		.55	.59	.51	.62	.33	.18	.09	-.07	.36	.17	.19	.52	.07	.47	.39	-.06	-.34	.35
Cs			.60	.55	.38	.40	.17	.11	.13	.48	.34	.04	.42	.26	.55	.42	.18	-.20	.44
Sy				.67	.55	.36	.15	.12	-.01	.42	.25	.14	.51	.05	.60	.29	.04	-.31	.34
Sp					.56	.33	-.05	-.02	-.18	.41	.06	.08	.32	.19	.63	.34	.29	-.46	.48
Sa						.07	-.10	-.01	-.39	.10	-.21	.18	.23	.05	.36	.18	.02	-.31	.28
Wb							.41	.46	.51	.63	.50	.34	.53	.23	.50	.37	.11	-.17	.30
Re								.37	.48	.39	.40	.22	.48	.20	.22	.20	-.03	.04	.13
So									.51	.26	.35	.34	.48	.04	.26	.02	-.13	-.08	.03

Table 16 (continued)

	Do	Cs	Sy	Sp	Sa	Wb	Re	So	Sc	To	Gi	Cm	Ac	Al	Ie	Py	Fx	Fe	CSS
Sc	-.07	.13	-.01	-.18	-.39	.51	.48	.51		.36	.79	.02	.50	.10	.14	.21	-.09	.07	.02
To	.36	.48	.42	.41	.10	.63	.39	.26	.36		.42	.09	.51	.59	.62	.46	.26	-.10	.50
Gi	.17	.34	.25	.06	-.21	.50	.40	.35	.79	.42		-.12	.50	.06	.25	.22	-.07	-.07	.09
Cm	.19	.04	.14	.08	.18	.34	.22	.34	.02	.09	-.12		.22	-.03	.21	.11	-.16	-.04	.02
Ac	.52	.42	.51	.32	.23	.53	.48	.48	.50	.51	.50	.22		.18	.53	.37	.12	-.22	.29
Al	.07	.26	.05	.19	.05	.23	.20	.04	.10	.59	.06	-.03	.18		.46	.34	.51	.03	.44
Ie	.47	.55	.60	.63	.36	.50	.22	.26	.14	.62	.25	.21	.53	.46		.40	.33	-.30	.53
Py	.39	.42	.29	.34	.18	.37	.20	.02	.21	.46	.22	.11	.37	.34	.40		.25	-.06	.36
Fx	-.06	.18	.04	.29	.02	.11	-.03	-.13	-.09	.26	-.07	-.16	-.12	.51	.33	.25		.09	.42
Fe	-.34	-.20	-.31	-.46	-.31	-.17	.04	-.08	.07	-.10	-.07	-.04	-.22	.03	-.30	-.06	.09		-.11
CSS	.35	.44	.34	.48	.28	.30	.13	.03	.02	.50	.09	.02	.29	.44	.53	.36	.42	-.11	

Table 17

Scale Intercorrelation Matrix for the

California Psychological Inventory

and the Counselor Selection

Scale--Females

	Do	Cs	Sy	Sp	Sa	Wb	Re	So	Sc	To	Gi	Cm	Ac	Ai	Ie	Py	Fx	Fe	GSS
Do		.44	.62	.42	.62	.20	.22	.10	-.13	.13	.08	.12	.33	-.07	.32	.18	-.05	-.03	.35
Cs	.44		.58	.54	.36	.37	.23	.10	.13	.46	.35	-.11	.39	.25	.56	.33	.30	-.11	.40
Sy	.62	.58		.63	.60	.35	.21	.07		.35	.20	.10	.40	.07	.53	.17	.13	-.12	.45
Sp	.42	.54	.63		.52	.20	-.11	-.11	-.21	.31	-.01	-.03	.14	.15	.46	.33	.42	-.09	.42
Sa	.62	.36	.60	.52		.06	-.01	-.10	-.31	-.01	-.04		.16	-.02	.28		.05	-.03	.26
Wb	.20	.37	.35	.20	.06		.44	.32	.59	.64	.61	.09	.62	.31	.49	.37	.02	-.06	.34
Re	.22	.23	.21	-.11	-.01	.44		.32	.50	.45	.41	.19	.52	.24	.32	.19	-.12	.04	.18
So	.10	.10	.07	-.11	-.10	.32	.32		.45	.24	.31	.30	.40	.02	.13	.06	-.26	.11	.01
Sc	-.13	.13		-.21	-.31	.59	.50	.45		.52	.76	.05	.59	.28	.27	.26	-.14	-.02	.07
To	.13	.46	.35	.31	-.01	.64	.45	.24	.52		.46	.02	.52	.61	.60	.47	.31	.10	.46
Gi	.08	.35	.20	-.01	-.04	.61	.41	.31	.76	.46		-.17	.59	.21	.27	.24	-.04	-.12	.14

Table 17 (continued)

	Do	Cs	Sy	Sp	Sa	Wb	Re	So	Sc	To	Gi	Cm	Ac	Ai	Ie	Py	Fx	Fe	CSS
Cm	.12	-.11	.10	-.03		.09	.19	.30	.05	.02	-.17		.10	-.17	.03	-.18	-.28	.12	.01
Ac	.33	.39	.40	.14	.16	.62	.52	.40	.59	.52	.59	.10		.30	.49	.30	-.08	-.06	.40
Ai	-.07	.25	.07	.15	-.02	.31	.24	.02	.28	.61	.21	-.17	.30		.45	.43	.55	-.04	.38
Ie	.32	.56	.53	.46	.28	.49	.32	.13	.27	.60	.27	.03	.49	.45		.42	.27	-.15	.51
Py	.18	.33	.17	.33		.37	.19	.06	.26	.47	.24	-.18	.30	.43	.42		.40	-.01	.38
Fx	-.05	.30	.13	.42	.05	.02	-.12	-.26	-.14	.31	-.04	-.28	-.08	.55	.27	.40		-.01	.39
Fe	-.03	-.11	-.12	-.09	-.03	-.06	.04	.11	-.02	.10	-.12	.12	-.06	-.04	-.14	-.01	-.01		
CSS	.35	.40	.45	.42	.26	.34	.18	.01	.07	.46	.14	.01	.40	.38	.51	.38	.39		

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ABSTRACT

The purpose of the study was to develop a Counselor Selection Scale that would facilitate the objective assessment of the counseling potential possessed by applicants to counselor training programs. The instrument was developed through the empirical approach to scale development which requires the statistical analysis of the item responses of subjects representing the opposite extremes of the construct to be examined. In this study the construct examined was counseling success as defined in terms of judged ratings on the basis of empathy, positive regard and counselor congruence.

Utilizing descriptions of people considered to be either high or low on the aforementioned qualities, supervisor judges from two independent school systems nominated 32 practicing counselors to the "most" effective group and 27 practicing counselors to the "least" effective group. The subsequent item analysis of their responses to the 480 items from the California Psychological Inventory (CPI) yielded 32 items which met or exceeded the .10 level of significance as indicated by a series of chi square tests. Of the 32 items, 15 were found to be statistically significant at the .05 level or better. The items designated as significant discriminators were incorporated into the Counselor Selection Scale (CSS).

In applying the CSS to combinations of counselors and counselor education students who, according to supervisors' ratings, were placed in the upper, middle, and lower quartiles of counseling effectiveness, the following results were noted:

1. The CSS successfully discriminated between the upper and lower, upper and middle, and middle and lower quartiles of practicing counselors who constituted the criterion group ($p < .001$).
2. The CSS successfully discriminated between the upper and lower, and upper and middle quartiles of a validating group of counselor education students ($p < .01$).
3. The CSS successfully discriminated between the upper and lower quartiles of a second validating group of counselor education students ($p < .02$) and approaches significance between the upper and middle quartiles ($p < .095$).

The findings indicate that the CSS has potential use as one in a series of variables to be considered in the selection of counselor education students. The research suggested the use of multiple regression prediction utilizing the CSS and discriminating scales from the CPI to assist in the trainee selection process.

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Pertinent work experiences include three years as a teacher of English in the Newark Valley Central School, Newark Valley, New York. Following this teaching experience, served as Assistant Dean of Students at State University College at Oneonta, Oneonta, New York, for two years. In this time single sex and coeducational residence hall direction were major duties and a one year internship was served at the College Counseling Center. Upon leaving Oneonta, attended the College of William and Mary in Williamsburg, Virginia, where served as a graduate assistant while completing the requirements of the Doctor of Education degree.